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Water Resources Data for Colorado
Water Year 1984. Volume 3
Dolores River Basin, Green River Basin, and San Juan River Basin

(U.S.) Geological Survey, Lakewood, CO

Jun 85

U.S. Department of Commerce
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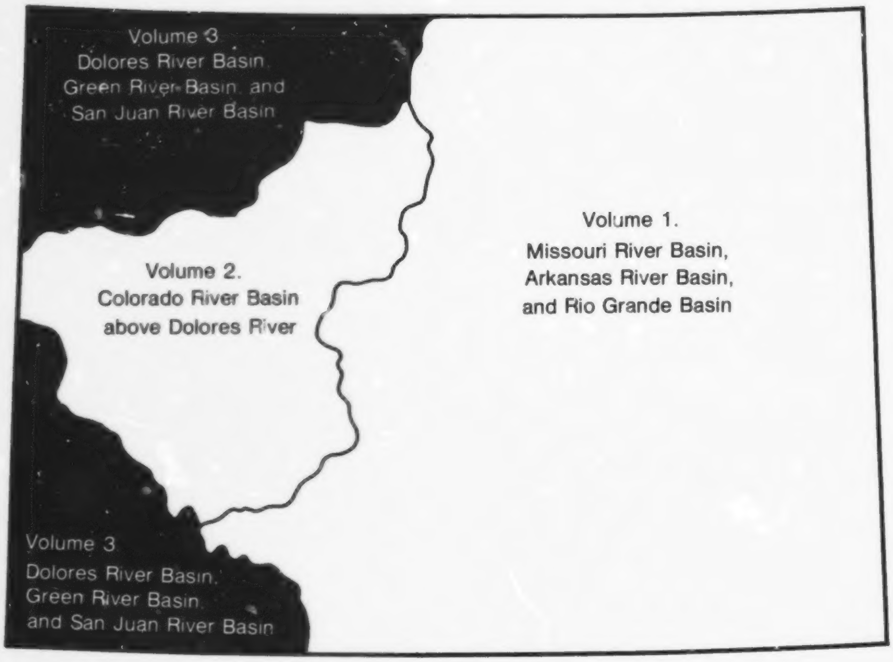
March 3, 1849

1876

Water Resources Data
Colorado
Water Year 1984

Volume 3. Dolores River Basin, Green River Basin, and San Juan River Basin


Volume 3
Dolores River Basin,
Green River Basin, and
San Juan River Basin
Volume 2.
Colorado River Basin
above Dolores River
Volume 1.
Missouri River Basin,
Arkansas River Basin,
and Rio Grande Basin
Volume 3
Dolores River Basin,
Green River Basin
and San Juan River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-84-3
Prepared in cooperation with the State of Colorado
and with other agencies

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CALENDAR FOR WATER YEAR 1984

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March 3, 1849

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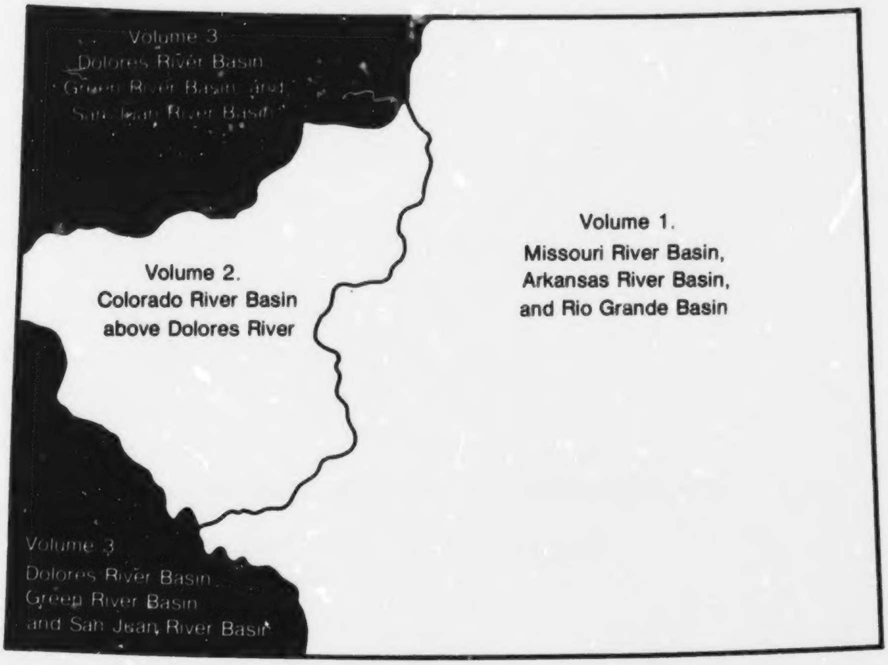
Water Resources Data Colorado
Water Year 1984

Volume 3. Dolores River Basin, Green River Basin, and San Juan River Basin

by A.C. Duncan, R.C. Ugland, J.D. Bennett, and E.A. Wilson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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-84-3
Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Colorado write to:

District Chief, Water Resources Division
U.S. Geological Survey
Box 25046, Mail Stop 415
Denver Federal Center
Lakewood, Co 80225

1985

PREFACE

This volume of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in three volumes:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River Basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River basins in Colorado.

This report is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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R. G. Carver
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16. Abstract (Limit: 200 words)

Water-resources data for Colorado for the 1984 water year consist of records of stage, discharge, and water quality of streams; stage, contents and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for 352 gaging stations, stage and contents of 23 lakes and reservoirs, 4 partial-record low-flow stations, peak flow information for 32 crest-stage partial record stations, and 1 miscellaneous sites; water quality for 126 gaging stations and 275 miscellaneous sites; and water levels for 55 observation wells. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.

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(Letter after station name designates type and frequency of published data.
Daily tables: (D) discharge, (C) specific conductance, (S) sediment,
(T) temperature, (e) elevation or contents, (O) dissolved oxygen, (P) pH.

Partial tables: (c) chemical, (b) biological, (m) microbiological,
(s) sediment, (t) temperature)

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WATER RESOURCES DATA FOR COLORADO, 1984

VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

By A.C. Duncan, R. C. Ugland, J. D. Bennett and E. A. Wilson

INTRODUCTION

Water-resources data for the 1984 water year for Colorado consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (volumes 1, 2, and 3) contains discharge records for 352 streamflow-gaging stations, stage and contents of 23 lakes and reservoirs, low-flow data for 4 partial-record stations, peak flow information for 32 crest-stage partial-record stations and 1 miscellaneous site; water-quality data for 116 streamflow-gaging stations and 275 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data were collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado and represent that part of the National Water Data System.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." These water-supply papers were published in an annual series through September 30, 1960, and then in 5-year compilations for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual series of water-supply papers entitled "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be purchased from Eastern Distribution Branch Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data on streamflow, water quality, and ground water are published in official survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-84-3." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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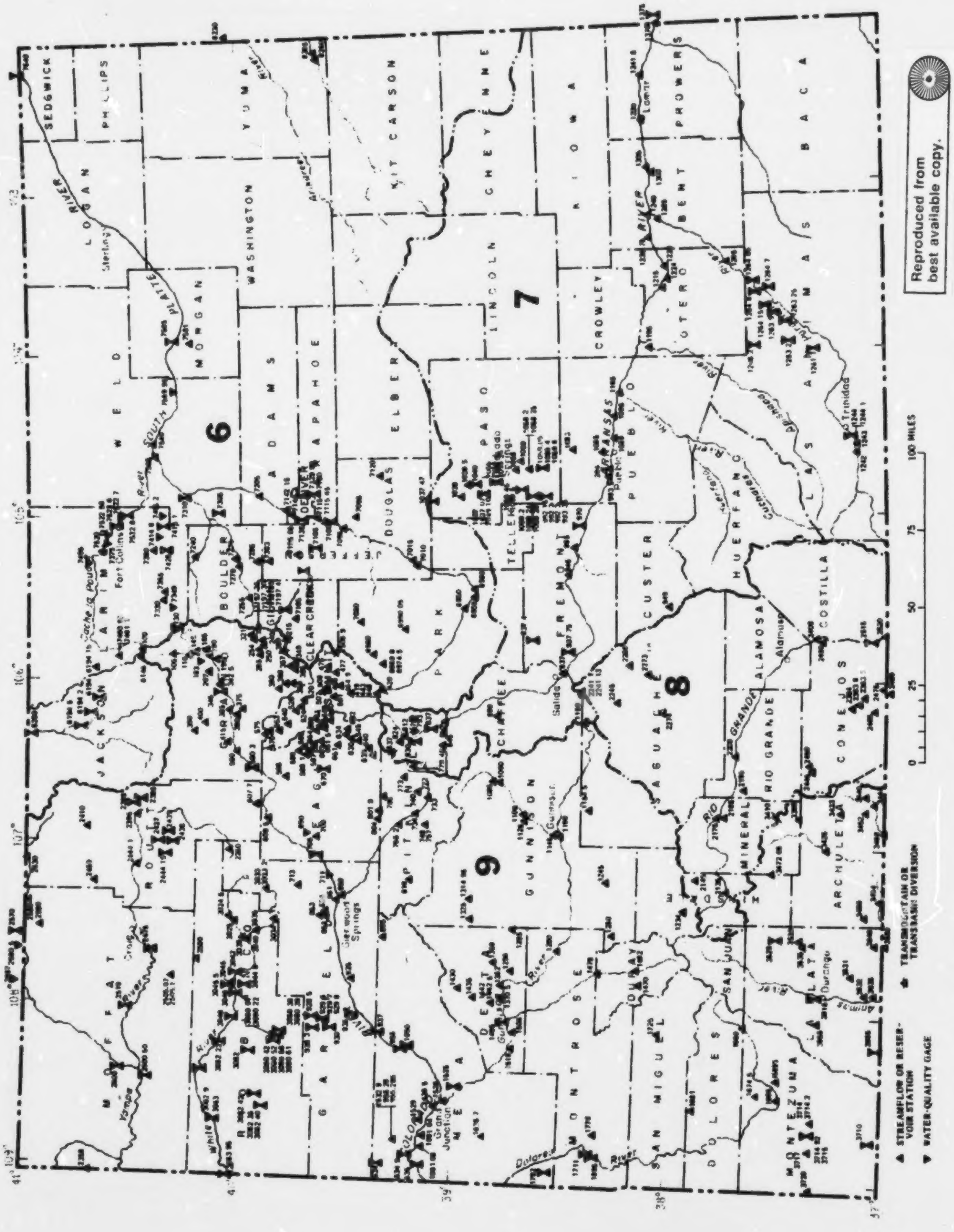

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▲ STREAMFLOW OR RESERVOIR STATION
▼ WATER-QUALITY GAGE
TRANSMOUNTAIN OR TRANSBASIN DIVERSION

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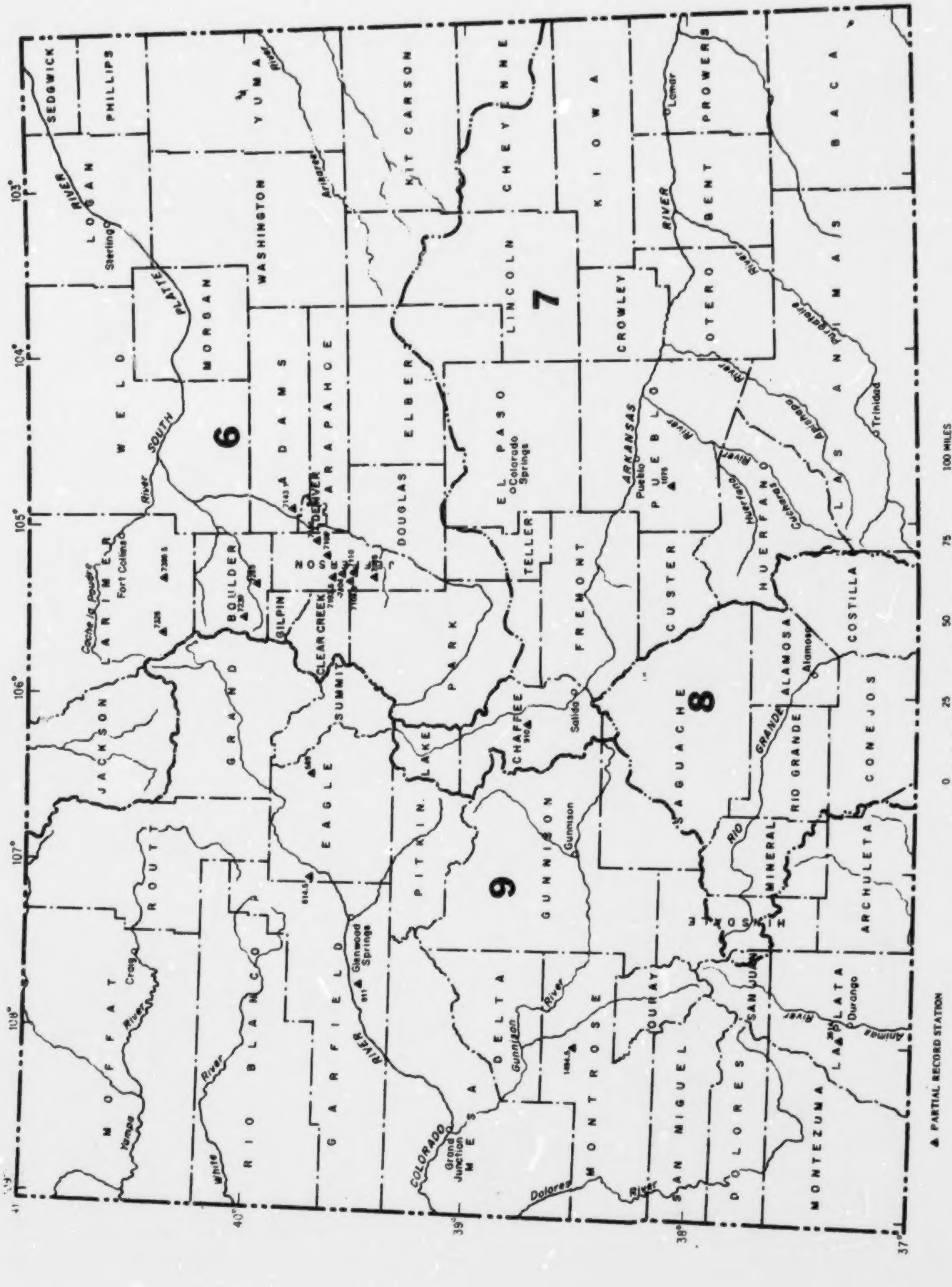
Figure 1.--Map showing locations of lakes and stream-gaging stations and water-quality stations in Colorado.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▲ PARTIAL RECORD STATION

Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

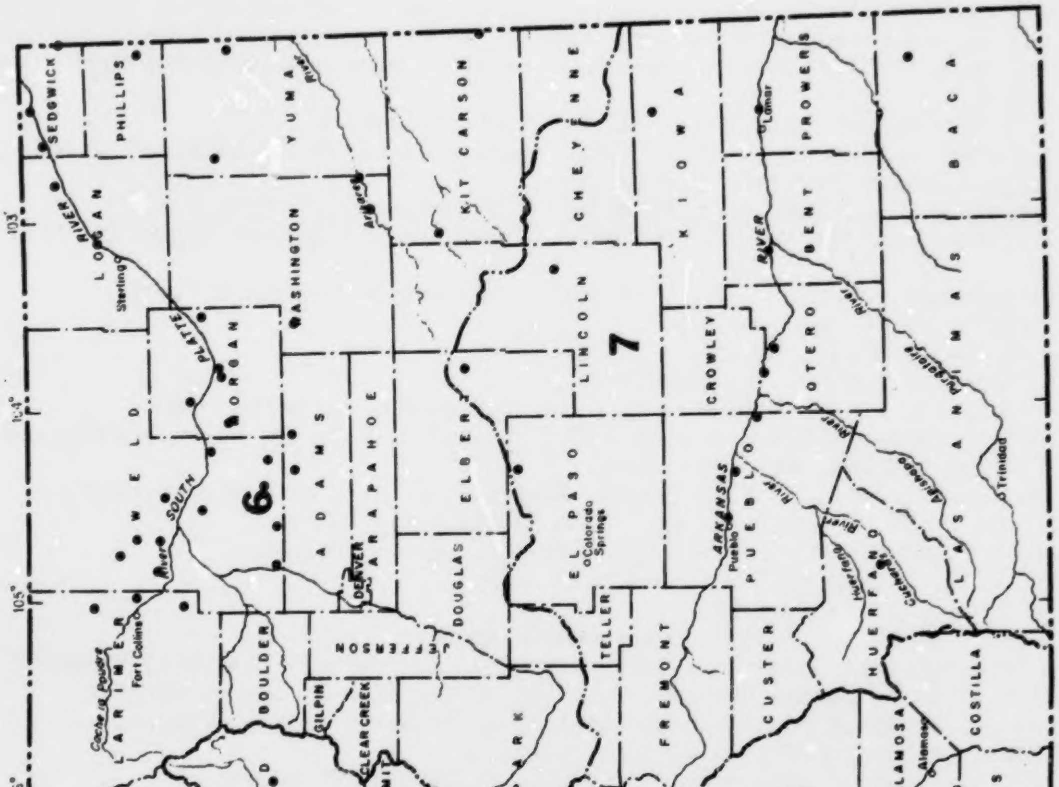

SEDGWICK
PHILLIPS
LOGAN
Sterling
YUMA
WASHINGTON
MORGAN
WELD
Fort Collins
LARIMER
Cache la Poudre
SOUTH PLATTE RIVER
ADAMS
ARAPAHOE
DENVER
BOULDER
JEFFERSON
GILPIN
CLEAR CREEK
DOUGLAS
ELBERT
KIT CARSON
CHEYENNE
LINCOLN
KIOWA
EL PASO
Colorado Springs
CROWLEY
PROWERS
Lamar
BENT
OTERO
PUEBLO
Pueblo
ARKANSAS RIVER
LAS ANIMAS
Trinidad
BACA
Purgatoire River
TELLER
FREMONT
CUSTER
HUERFANO
COSTILLA
ALAMOSA
Alamosa
CONEJOS
RIO GRANDE
SAGUACHE
MINERAL
ARCHULETA
HINSDALE
SAN JUAN
LA PLATA
Durango
MONTEZUMA
DOLORES
SAN MIGUEL
OURAY
MONTROSE
Dolores River
DELTA
Gunnison River
GUNNISON
Gunnison
MESA
Grand Junction
COLORADO RIVER
GARFIELD
Glenwood Springs
RIO BLANCO
White River
MOFFAT
Yampa River
Craig
ROUTT
JACKSON
GRAND
EAGLE
SUMMIT
LAKE
PITKIN
CHAFFEE
Salida
PARK
6
7
8
9
41°
40°
39°
38°
37°
103°
104°
105°
106°
107°
108°
109°
0 25 50 75 100 MILES

Figure 3.--Location of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Arkansas River Compact Administration, L. Idler, Secretary.
City and County of Denver, Board of Water Commissioners, J. A. Yelenick, President.
City of Aspen, Wayne Chapman, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Englewood, Dr. W. F. Owen, Director, Wastewater Treatment Plant.
City of Fruita, W. G. Downer, Mayor.
City of Glendale, Robert Taylor.
City of Steamboat Springs, J. Zimmerman.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Custer County, Leonard Reis, Chairman.
Denver Regional Council of Governments, Robert D. Farley, Executive Director.
Eagle County Board of Commissioners, D. E. Mott, Commissioner.
Evergreen Metropolitan District, G. O. Schulte, General Manager.
Fountain Valley Authority, Ed Bailey, Secretary.
Garfield County, Rodger Ludwig.
Grand County, R. Howard Moody, County Commissioner.
Larimer-Weld Regional Council of Governments, L. L. Pearson, Executive Director.
Metropolitan Denver Sewage Disposal District No. 1, Jack B. Enger, Manager.
Pitkin County Board of County Commissioners, C. Stewart, County Manager.
Pueblo Civil Defense, Betty Jo Hopper, Director.
Purgatoire River Water Conservancy District, C. Latuda, President.
Rio Blanco County Board of County Commissioners, A. J. Jones.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southwestern Water Conservation District, Edward Searle, Manager.
Town of Breckenridge, J. A. Humphreys, Acting Town Manager.
Town of Castle Rock, Tom Gallier, Director of Utilities.
Uncompahgre Valley Water Users Association, James Herbit, Manager.
Upper Yampa Water Conservancy District, J. Fetcher.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; U.S. Air Force; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Bureau of Reclamation, the National Park Service, and the U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

Precipitation

Generally, precipitation during the water year was greater than normal throughout the State. This represents a continuation of the high precipitation pattern of the preceding water year. The snowpack in the mountains varied from 114 to 207 percent of normal. Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, for five major basins in Colorado are shown in table 1.

Table 1.--Precipitation during 1984 and departures from normal precipitation, in inches

DRAINAGE BASIN	OCTOBER--MARCH		APRIL--SEPTEMBER		WATER YEAR	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Colorado River-----	10.31	+2.70	11.71	+2.70	22.02	+6.66

Streamflow

Streamflow in the Dolores River, Green River, and San Juan River basins was greater than normal during the water year. Monthly and annual mean discharges for the 1984 water year are compared with the median monthly and annual mean discharges for the 1951-80 water years as shown in figure 4. The monthly mean discharge for 1984 water year at station 09251000, Yampa River near Maybell, ranged from 118 percent of normal in March to 332 percent of normal in September. The 1984 annual mean discharge was 205 percent of normal as compared to 148 percent of normal for the 1983 water year. For station 09361500, Animas River at Durango, the monthly mean discharges for the 1984 water year varied from 114 percent of normal in April to 230 percent of normal in August. The 1984 annual mean discharge was 152 percent of normal as compared to 149 percent of normal for the 1983 water year.

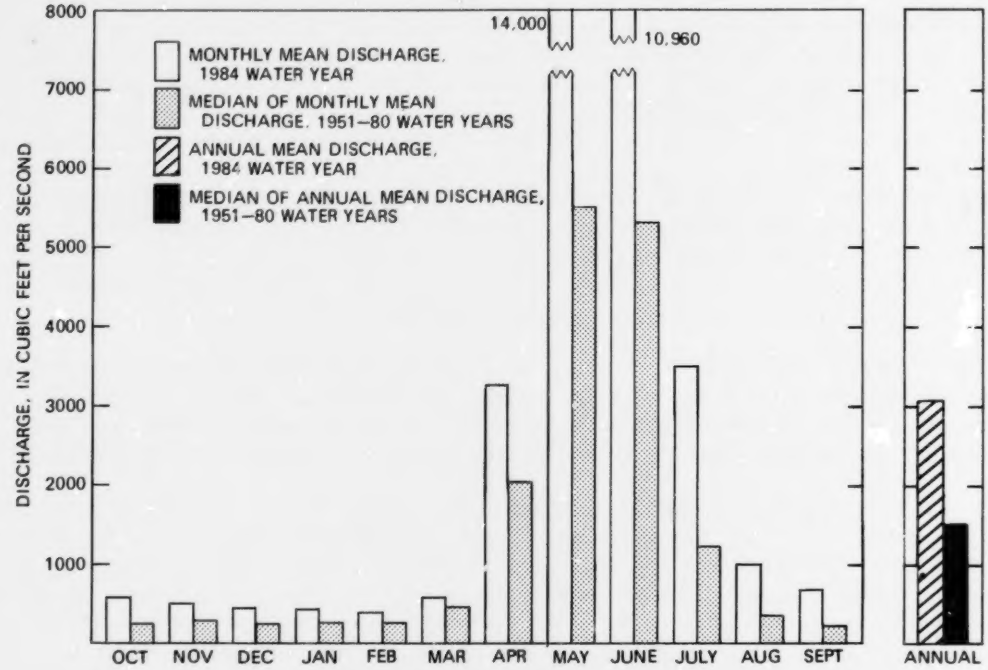
Runoff from the large snowpack produced numerous new peak discharges. In general, the peak discharge for the White and Yampa Rivers (see table 2) had recurrence intervals of about 500 years. Storage in Vallecito Reservoir was 67,450 acre-feet; an increase from the 1983 water year of 4,880 acre-feet.

Table 2.--Summary of flood stage and discharge at gaging stations where new peak discharges for the period of record occurred during the 1984 water year

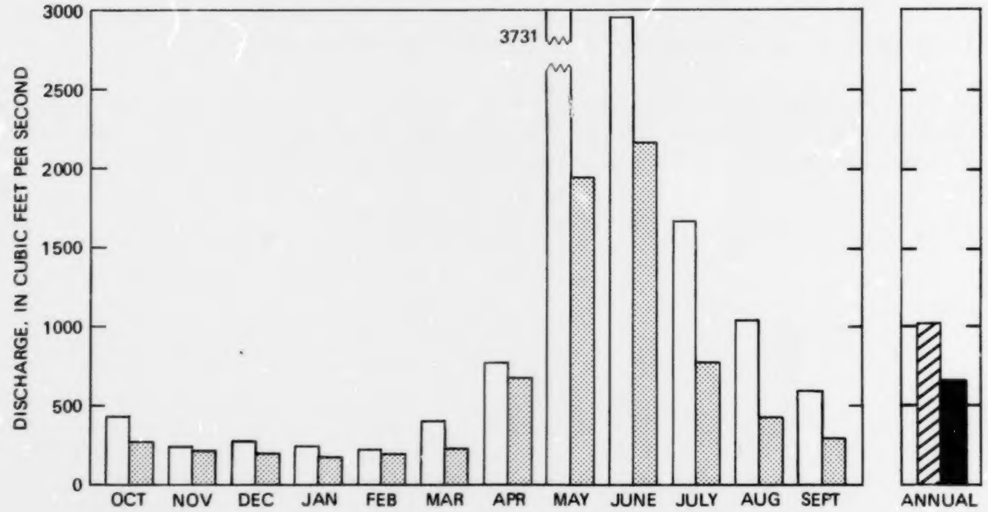
(mi², square mile; ft, feet; ft³/s, cubic foot per second)

				Maximum previously known			Maximum during 1984 Water year		
Station number	Station name	Drainage area (mi²)	Period of record	Date	Gage height (ft)	Discharge (ft³/s)	Date	Gage height (ft)	Discharge (ft³/s)
09243700	Middle Creek near Oak Creek	23.5	1976-81, 1983-84	5-11-80	3.21	172	5-14	4.08	329
09241000	Elk River at Clark	206	1910-22 1930-84	6-06-12, 6-09-12	a	4,470	5-23	6.12	4,910
09244410	Yampa River below diversion	1,430	1965-84	4-27-84	11.90	12,300	5-16	11.45	13,100
09245000	Elkhead Creek near Elkhead	64.2	1910-20, 1953-84	5-27-83	7.17	1,950	5-20	7.58	2,850
09250000	Milk Creek near Thornburg	65.0	1952-84	5-10-74	5.03	1,050	5-14	7.36	1,580
09250507	Wilson Creek above Taylor Creek	20.0	1980-84	5-12-83	4.43	82	5-14	8.71	352
09250510	Taylor Creek at Mouth	7.22	1975-84	2-19-81	2.69	18	5-15	2.25	41
09251000	Yampa River near Maybell	3,410	1904-05, 1910-12, 1916-84	5-19-17	10.4	17,900	5-17	12.42	25,100
09253000	Little Snake River near Slater	285	1942-47, 1950-84	5-28-83	8.09	4,200	5-23	8.78	4,780
09255000	Slater Fork near Slater	161	1910-12, 1931-84	5-08-74	10.75	1,860	5-16	11.78	2,250
09257000	Little Snake River near Dixon, Wy	988	1911-23, 1939-84	5-26-20	11.6	9,600	5-16	13.56	14,700
09260000	Little Snake River near Lily	3,730	1921-84	5-27-26	10.5	14,200	5-18	9.85	16,700
09260050	Yampa River at Deerlodge Park	7,660	1982-84	5-31-83	13.22	23,400	5-18	19.13	33,200
09303000	N.F. White River at Buford	260	1910-15, 1919-20, 1951-84	5-30-12	-	3,150	5-24	6.76	3,550
09304500	White River near Meeker	755	1901-06, 1909-84	6-26-83	5.89	6,700	5-25	6.12	6,950
09306036	Sorghum Gulch at Mouth	3.62	1974-84	9-03-77	2.92	59	8-24	11.43	207
09306039	Cottonwood Gulch near Rio Blanco	1.20	1974-84	9-03-77	2.94	53	8-16	3.96	534
09306042	Piceance Creek Trib. near Rio Blanco	1.06	1974-84	9-03-77	2.57	304	8-01	6.38	576
09306052	Scandard Gulch at Mouth	7.97	1974-84	3-11-83	1.27	9.7	8-01	1.77	32
09306200	Piceance Creek below Ryan Gulch	506	1964-84	5-20-83	7.81	480	5-16	7.74	525
09306224	White River above Crooked Wash	1,821	1983-84	6-27-83	-	b6,000	6-07	8.05	6,370
09306242	Corral Gulch near Rangely	31.6	1974-84	6-01-83	4.45	620	8-18	6.12	1,780
09306290	White River below Boise Creek	2,530	1982-84	6-27-83	8.31	6,060	6-07	8.45	6,440

a-Maximum daily discharge.
b-About.



A. Yampa River near Maybell. Drainage area 3,410 square miles



B. Animas River at Durango. Drainage area 692 square miles

Figure 4.--Discharge for 1984 water year compared with median discharge for 1951-80 water years at two representative streamflow-gaging stations.

Chemical Quality of Streamflow

A third consecutive year of greater than-normal runoff in the Dolores, Green, and San Juan River basins during 1984 resulted in smaller specific-conductance values, and smaller major-ion and dissolved-solids concentrations in most of the streams. An exception to this occurs at the Ca oil-shale tract stations in the Piceance Creek basin, where the specific-conductance values and major-ion and dissolved-solids concentrations were larger than in past years of record. This phenomena occurred in spite of the increased streamflows for the past 2 years. Greater than normal runoff was the contributing factor for the increase in the suspended sediment discharge at Piceance Creek below Rio Blanco, station, 09306007, from 8,500 tons per day during 1983 to 18,800 tons per day during 1984.

Ground Water

Water levels indicate the response of an aquifer to recharge and discharge. Recharge and discharge can be either natural or manmade. Water levels will rise when recharge is plentiful and discharge is small and will decline when recharge is small and discharge is large. Water levels also are used to help define hydrologic units.

The aquifers within the Dolores River, Green River, and San Juan River basins can be grouped into two categories: Unconsolidated aquifers and consolidated aquifers. The unconsolidated aquifers receive recharge from precipitation, return flow from irrigation, and leakage from canals and streams. Discharge of ground water may be by seepage to streams, seeps, or springs, by loss to evapotranspiration, or by withdrawal by wells. The consolidated aquifers receive recharge from precipitation and streams crossing outcrop areas. These aquifers primarily discharge water to springs and streams, although locally some discharge is by wells.

West of the Continental Divide, where withdrawals are small, water-level fluctuations reflect mostly changes in natural conditions.

Most of the aquifers in the Dolores River, Green River, and San Juan River basins are still under natural conditions except where ground water is being pumped for the production and development of oil, gas, coal, and shale oil.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal-growth potential (AGP) refers to the results of an algal assay test which determines the nutrients that are limiting to growth, as well as to quantify the biological response to changes in concentrations of algal growth-limiting nutrients. These measurements are made by inoculating a water sample with an algal test organism and evaluating its growth response to various additions of nutrients overtime. The water samples are spiked with .005 mg/L phosphorus and .075 mg/L nitrogen, and the algal growth potential results are reported in milligrams per liter.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod like, of spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2C° on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which the bottom of a streambed, lake, pond, reservoir, or estuary is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter (mg/L), necesssary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area of volume of habitat.

Ash mass is the mass of amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and those for periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, or 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This may include some very small (colloidal) suspended particles as well as the amount of substance present in true chemical solution. It is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air and is a function of atmospheric pressure and temperature and dissolved-solids concentration of the water. The capacity of water for dissolved-oxygen decreases as dissolved solids or temperature increase or as atmospheric pressure decreases. Dissolved-solids concentration has the least effect on dissolved-oxygen concentration. Photosynthesis and respiration may cause diel variations in dissolved-oxygen concentration in water from some streams.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium anbd magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulaltion tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 3.-- Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as N	.07139	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate ($HCO_3{}^{-1}$)	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})*	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate ($CO_3{}^{-2}$)	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate as N	.07139
Chronium (Cr^{+6})*	.11539	Nitrite as N	.07139
Cobalt (Co^{+2})*	.03394	Phosphate,ortho as P	.09686
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2}*	.02283
Hydrogen (H^{+1})	.99209	Sulfate ($SO_4{}^{-2}$)	.02082
Hydroxide (OH^{-1})	.05880	Zinc (ZN^{+2})*	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 4.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*

(All values calculated to three significant figures)

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	639-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	313-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.............	0.00024 - 0.004	Sedimentation
Silt.............	.004 - .062	Sedimentation
Sand.............	.062 - 2.0	Sedimentation or sieve
Gravel...........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to, and growing upon, solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PC/L (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.09 m) above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge in cfs times concentration in mg/L times 0.0027.

Suspended-sediment load is that quantity of suspended sediment passing a section in a specified period.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the number and specific chemical types of ions in solution and can be used for approximating the dissolved-solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample.

To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in the U.S. Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1981, is called the "1981 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports published prior to 1975.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the sequential allocation of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly or annual figures of discharge are affected by the revisions, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage above mean sea level, referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites follow the information for continuous record sites. Data for partial-record discharge stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the folowing agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and the Bureau of Reclamation.

Access to WATSTORE DATA

The National WAter Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near streamflow-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data, the period of daily record for parameters that are measured on a daily basis (such as, specific conductance, pH, dissolved oxygen, water temperature, sediment discharge), extremes for the period of daily record, extremes for current year, and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 39.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 grams per milliliter (g/mL), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

REVISIONS--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Table 5.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C equals 5/9(°F-32°) or °F equals 9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. See "Definition of Terms," and table 5 for converting English units to SI units.

The biological information includes qualitative and quantitative analyses of plankton, periphyton, Chlorophyll a and b, biomass and bottom organisms. Microbiological information includes quantitative identification of selected bacteriological indicator organisms.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment-discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 ton per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado are shown in the following table:

Table 6.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[1]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	2165	[2]2166	[2]2167	[2]2168	----

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[1] Annual series, "Quality of Surface Waters for Irrigation, Western States."

[2] In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits are sequential numbers for wells within a 1-second grid, as shown below in figure 6.

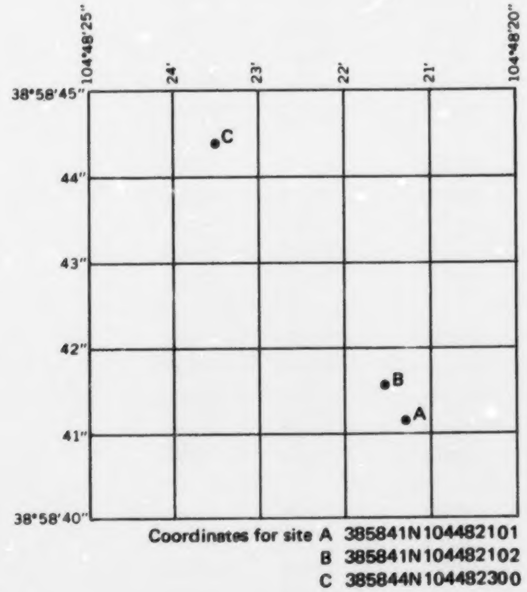

Figure 5.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi by townships and is subdivided in the east-west direction every 6 mi by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 area described by the township and range designation is subdivided into 1-mi^2 areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the meaasuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for six sections of the United States. Water-level data for Colorado are included in the water-supply papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

SELECTED REFERENCES

The following publications are available for background information on the methods for collecting, analyzing, and evaluating the chemical and physical properties of surface waters:

American Public Health Association, and others, 1980, Standard methods for the examination of water and waste water, 13th ed: American Public Health Assoc., New York, 1134 p.

Cain, D. L., 1984, Quality of the Arkansas River and irrigation-return flows in the lower Arkansas River Valley of Colorado: Water-Resources Investigation Report 84-4273, 91 p.

Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6, 13 p.

Clarke, F. W., 1924, The composition of the river and lake waters of the United States: U.S. Geological Survey Professional Paper 135, 199 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurements of sediment discharge: U.S. Geological Survey Bulletin 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geological Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geological Survey Water-Supply Paper 1593, 17 p.

Collins, W. D., and Howard, C. S., 1928, Quality of water of Colorado River in 1925-26: U.S. Geological Survey Water-Supply Paper 596-B, p. 33-43.

Corbett, D. M., and others, 1942, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geological Survey Water-Supply Paper 888, 245 p.

Crouch, T. M., and others, 1984, Water-Resources Appraisal of the upper Arkansas River basin from Leadville to Pueblo, Colorado: Water-Resources Investigation Report 82-4114, 123p.

Fishman, M. J., and Bradford, W. L., 1982, A supplement to methods for the determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A1, open-file report 82-272, 136 p.

Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A3, 40 p.

Gregg, D. O., and others, 1961, Public water supplies of Colorado (1959-60): Fort Collins, Colorado State University Agricultural Experiment Station, General Service 757, 128 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geological Survey Techniques of Water-Resources Investigation, Book 3, Chapter C1, 55 p.

_____1969, Laboratory theory and methods for sediment analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C1, 57 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C2, 59 p.

Hawley, Gessner G., 1981, The condensed chemical dictionary; Van Nostrand-Reinhold Publication Corporation, New York, 10th edition, 1135 p.

Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Howard, C. W., 1955, Quality of water of the Colorado River, 1925-40: U.S. Geological Survey open-file report, 103 p.

Iorns, W. V., and others, 1964, Water Resources of the Upper Colorado River basin--basic data: U.S. Geological Survey Professional Paper 442, 1,036 p.

_____1965, Water Resources of the Upper Colorado River basin--technical report: U.S. Geological Survey Professional Paper 441, 370 p.

Lane, E. W., and others, 1947, Reports of Subcommittee on terminology: American Geophysical Union Transaction, v. 28, p. 937.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.

Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geological Survey Water-Supply Paper 1988, p. 2.

McGuinness, C. L., 1963, The role of ground water in the national water situation: U.S. Geological Survey Water-Supply Paper 1800, 1121 p.

Meinzer, O. E., 1923, The occurrence of ground water in the United States: U.S. Geological Survey Water-Supply Paper 489, 321 p.

_____1923, Outline of ground-water hydrology, with definitions: U.S. Geological Survey Water-Supply Paper 494, 71 p.

Moran, R. E., and Wentz, D. A., 1974, Effects of metal-mine drainage on water quality in selected areas of Colorado, 2 of 3, 1972-73: Colorado Water Conservation Board Circular 25, 250 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C3, 33 p.

Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A4, 165 p.

Spahr, N. E., Blakely, S. R., and Hammond, S. E., 1985, Selected Hydrologic Data for the South Platte River through Denver, Colorado: U. S. Geological Survey open file report 84-703, 225 p.

Stabler, Herman, 1911, Some stream waters of the Western United States: U.S. Geological Survey Water-Supply Paper 274, 188 p.

U.S. Inter-Agency Committee on Water Resources, A study of methods used in measurements and analysis of sediment loads in streams:

Report 11, 1957, The development and calibration of visual accumulation tube: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 109 p.

Report 12, 1957, Some fundamentals of particle-size analysis: Washington, D. C., U.S. Government Printing Office, 55 p.

Report AA, 1959, Federal Inter-Agency sedimentation instruments and reports: St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn., 41 p.

Report 13, 1961, The single-stage sampler for suspended sediment: Washington, D. C., U.S. Government Printing Office, 105 p.

Report 14, 1963, Determinations of fluvial sediment discharge: Washington, D. C., U.S. Government Printing Office 151 p.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing,* by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply,* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells,* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels,* by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

DOLORES RIVER BASIN

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi upstream from Ryman Creek, and 4.0 mi southwest of Rico.

DRAINAGE AREA.--105 mi^2.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 136 ft^3/s; 98,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft^3/s, May 24, 1984, gage height, 5.95 ft; from rating curve extended above 1,620 ft^3/s, maximum gage height, 6.15 ft, June 10, 1952; minimum daily discharge, 7.0 ft^3/s, Nov. 16, 17, 1956, Feb. 6, 7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	0230	1,260	5.08	June 13	2230	1,000	4.78
May 24	2100	*2,170	5.95	June 25	2200	1,510	5.37

Minimum daily discharge, 24 ft^3/s, Jan. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	35	34	36	30	36	55	109	1190	420	100	152
2	104	35	36	34	32	38	53	111	1100	360	88	119
3	88	35	36	32	32	39	50	108	968	320	84	100
4	79	35	36	32	32	38	49	124	829	285	91	90
5	72	35	34	34	32	38	57	126	801	258	90	83
6	75	33	32	34	34	38	63	130	634	228	200	77
7	70	32	32	34	34	36	67	136	822	215	124	74
8	67	39	34	34	34	36	83	150	675	220	104	67
9	65	32	34	34	34	35	98	205	544	232	104	63
10	62	36	34	34	36	38	88	291	495	212	104	61
11	59	36	36	34	36	41	94	440	556	183	109	61
12	53	35	34	34	34	41	88	661	647	165	124	60
13	52	35	34	32	34	39	98	745	773	181	116	54
14	53	35	34	34	36	41	119	815	885	172	146	51
15	50	29	34	34	36	41	156	1100	871	167	161	60
16	47	33	32	32	36	40	202	1090	822	140	176	103
17	47	32	32	32	36	39	240	1070	710	130	183	86
18	46	34	34	30	34	39	276	913	668	121	208	67
19	43	32	34	30	34	43	261	822	668	112	200	61
20	43	30	34	28	32	51	208	1140	668	109	208	57
21	42	30	34	26	32	75	172	1280	640	104	246	60
22	39	30	34	26	34	88	152	1470	616	106	183	60
23	38	28	34	26	36	76	154	1630	550	97	176	68
24	39	30	34	24	36	83	185	1730	515	102	202	77
25	37	32	36	26	36	88	215	1720	738	116	205	61
26	37	34	38	28	32	81	181	1590	787	134	208	61
27	36	32	38	30	30	71	156	1520	604	118	167	74
28	35	32	36	30	30	63	136	1400	510	118	144	61
29	35	32	34	32	32	61	124	1280	455	116	128	55
30	36	32	34	30	---	59	112	1180	460	150	116	53
31	36	---	34	30	---	56	---	1140	---	118	109	---
TOTAL	1711	990	1066	966	976	1588	3992	26226	21201	5509	4604	2176
MEAN	55.2	33.0	34.4	31.2	33.7	51.2	133	846	707	178	149	72.5
MAX	126	39	38	36	36	88	276	1730	1190	420	246	152
MIN	35	28	32	24	30	35	49	108	455	97	84	51
AC-FT	3390	1960	2110	1920	1940	3150	7920	52020	42050	10930	9130	4320

CAL YR 1983 TOTAL 75183 MEAN 206 MAX 1410 MIN 22 AC-FT 149100
WTR YR 1984 TOTAL 71005 MEAN 194 MAX 1730 MIN 24 AC-FT 140800

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'21", long 108°29'49", in SW¼SW¼ sec.10, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 0.25 mi upstream from bridge on State Highway 184 in Dolores and 0.8 mi upstream from Lost Canyon Creek. Prior to Nov. 17, 1983, at site 0.4 mi downstream.

DRAINAGE AREA.--504 mi^2.

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,940 ft, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952. Oct. 7, 1952 to Nov. 16, 1983, at site 0.4 mi downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--73 years (water years 1896-1903, 1911-12, 1922-84), 433 ft^3/s; 313,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s, Oct. 5, 1911, gage height, 10.2 ft, site and datum then in use, from rating curve extended above 2,800 ft^3/s; minimum daily, 8.0 ft^3/s, Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 18	1900	1,970	5.07	May 25	0330	*6,450	7.84
May 16	0300	6,340	7.78				

Minimum daily discharge, 65 ft^3/s, Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	85	90	85	80	90	261	701	3120	1030	328	418
2	273	85	95	75	85	100	254	766	2940	878	295	432
3	230	85	95	75	85	110	230	790	2540	736	291	360
4	195	83	90	80	90	120	233	1080	2210	662	287	324
5	171	81	85	85	90	100	272	1280	2220	600	291	303
6	154	80	70	90	95	100	338	1420	2200	540	405	287
7	149	76	70	95	100	110	364	1500	2200	500	382	272
8	141	99	80	95	100	110	455	1680	2060	465	338	258
9	149	99	85	90	100	130	572	2070	1700	572	330	247
10	138	83	90	90	100	160	460	2420	1510	518	310	244
11	131	95	85	85	90	180	506	2940	1450	465	300	268
12	126	93	90	85	75	180	470	3680	1540	414	310	275
13	116	91	80	85	85	180	566	4230	1670	400	310	268
14	114	89	80	85	95	180	680	4380	1880	400	300	261
15	116	74	80	80	95	190	902	5420	1900	405	390	261
16	112	71	75	75	75	190	1210	5340	1800	360	370	338
17	105	79	80	70	85	190	1500	4820	1620	338	350	405
18	105	98	85	75	85	190	1780	4600	1450	307	450	287
19	101	82	90	80	65	190	1670	4020	1380	315	470	236
20	99	82	80	80	75	208	1370	4520	1380	346	490	202
21	97	75	75	75	75	295	1070	4940	1320	315	490	193
22	93	70	70	80	80	396	937	5080	1320	320	512	222
23	89	80	75	75	80	333	910	5420	1210	324	485	222
24	87	75	75	70	75	342	1220	5540	1130	303	566	258
25	89	75	85	75	85	387	1540	5480	1120	303	560	233
26	85	80	90	75	80	351	1170	5020	1300	369	626	216
27	81	80	90	75	70	315	964	4580	1330	346	506	233
28	78	75	85	70	75	268	830	4110	1160	342	446	172
29	76	85	80	70	80	272	736	3600	1040	351	405	142
30	81	85	70	75	---	275	694	3440	1040	470	374	128
31	81	---	75	80	---	261	---	3090	---	396	356	---
TOTAL	3992	2490	2545	2480	2450	6503	24164	107957	50740	14090	12323	7965
MEAN	129	83.0	82.1	80.0	84.5	210	805	3482	1691	455	398	266
MAX	330	99	95	95	100	396	1780	5540	3120	1030	626	432
MIN	76	70	70	70	65	90	230	701	1040	303	287	128
AC-FT	7920	4940	5050	4920	4860	12900	47930	214100	100600	27950	24440	15800

CAL YR 1983 TOTAL 258233 MEAN 707 MAX 5290 MIN 48 AC-FT 512200
WTR YR 1984 TOTAL 237699 MEAN 649 MAX 5540 MIN 65 AC-FT 471500

09166950 LOST CANYON CREEK NEAR DOLORES, CO

LOCATION.--Lat 37°26'46", long 108°28'07", in SE¼SE¼ sec.23, T.37N., R.15W., Montezuma County, Hydrologic Unit 14030002, on right bank 3 mi upstream from mouth, and 2.5 mi southeast of Dolores

DRAINAGE AREA.--71.3 mi^2.

PERIOD OF RECORD.--April to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 7,030 ft, from topographic map.

REMARKS.--Records good. Several small storage reservoirs and diversions for irrigation of about 4,700 acres in the San Juan River basin and one diversion for irrigation of about 10 acres in Lost Canyon in the Dolores River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD APRIL TO SEPTEMBER.--Maximum discharge, 678 ft^3/s at 0100 May 13, gage height, 6.76 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							19	70	28	.15	.54	.00
2							19	80	26	.12	.23	.00
3							18	90	20	.10	.28	.00
4							22	130	18	.02	.68	.00
5							30	280	22	.01	.41	.00
6							42	270	52	.01	.68	.00
7							55	267	53	.01	.68	.00
8							75	276	38	.01	.23	.00
9							65	350	5.3	.01	.20	.00
10							48	392	2.6	.01	.20	.00
11							65	455	2.4	.00	.20	.00
12							42	480	1.6	.00	.20	.00
13							50	472	1.5	.01	.12	.00
14							60	404	1.6	.01	.02	.00
15							70	482	2.1	.01	.02	.00
16							85	452	1.9	.01	.08	.00
17							100	362	2.9	.01	.28	.00
18							140	296	6.0	.01	.26	.00
19							140	206	7.1	.10	.24	.00
20							120	220	4.9	.05	.11	.00
21							85	231	2.4	.01	.08	.00
22							75	204	1.5	.01	.12	.00
23							95	149	1.3	.01	.15	.00
24							162	127	1.2	.01	.28	.00
25							170	84	1.3	.01	.25	.00
26							95	59	1.2	.02	.23	.00
27							80	38	.25	.02	.02	.00
28							70	25	.15	.05	.01	.00
29							65	15	.18	.15	.01	.00
30							75	6.4	.15	.68	.00	.00
31							---	25	---	.54	.00	---
TOTAL							2237	6997.4	306.53	2.17	6.81	.00
MEAN							74.6	226	10.2	.070	.22	.000
MAX							170	482	53	.68	.68	.00
MIN							18	6.4	.15	.00	.00	.00
AC-FT							4440	13880	608	4.3	14	.00

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi downstream from ford, 6.5 mi southeast of Cedar, and 19 mi northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage height record, which are poor. Several small reservoirs and and ponds above station. Small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 20.1 ft^3/s; 14,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft^3/s, Aug. 8, 1983, gage height, 13.54 ft, from rating curve extended above 250 ft^3/s, on basis of slope-area measurements at gage heights 7.18, 10.26, and 13.38 ft; maximum gage height, 13.54 ft, July 13,1965 (slope-area measurement), Aug. 8, 1983; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 560 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 24	1600	*1,540	9.06	Aug. 16	2030	1,220	8.30
Aug. 14	1830	964	7.56				

Minimum daily discharge, 0.91 ft^3/s, Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	3.8	6.5	7.0	7.5	17	32	123	190	29	13	11
2	30	3.8	7.0	6.0	8.0	21	30	129	168	28	15	11
3	20	3.5	7.0	6.0	8.0	21	26	138	150	24	14	8.6
4	10	3.5	6.5	7.0	8.5	11	24	173	138	23	13	6.9
5	5.1	3.5	6.0	7.5	8.5	11	42	217	152	22	36	6.3
6	4.0	3.0	5.0	8.0	9.0	11	62	200	159	21	47	5.7
7	4.0	3.2	5.5	8.0	10	12	84	190	173	19	35	5.0
8	4.8	8.6	6.0	8.0	10	14	115	186	143	19	11	4.8
9	4.2	11	6.5	8.0	9.5	20	125	216	117	19	9.6	4.6
10	4.0	4.5	7.0	7.5	9.0	31	87	240	104	18	8.9	4.4
11	3.5	6.6	6.5	7.5	8.0	26	109	266	98	16	7.8	4.0
12	3.0	6.9	6.5	7.0	7.0	21	75	280	95	13	63	4.2
13	2.5	6.3	6.0	7.0	8.5	32	103	276	95	13	.91	3.8
14	2.5	5.7	6.0	7.0	9.0	60	123	279	92	13	134	3.5
15	2.5	5.1	6.0	7.0	8.5	66	143	304	89	13	83	3.8
16	2.5	4.0	5.5	6.5	7.5	82	171	312	85	12	151	17
17	2.5	4.5	6.0	6.5	8.5	56	199	259	79	11	30	13
18	2.8	7.5	7.0	6.5	8.0	35	234	246	68	10	13	7.8
19	2.5	7.8	7.0	6.5	7.0	30	195	220	61	8.9	20	6.0
20	2.5	8.2	6.5	7.0	7.5	48	160	226	59	7.8	50	5.4
21	2.5	9.2	6.0	7.0	7.5	76	161	228	57	7.5	77	9.2
22	2.5	5.4	5.5	7.0	8.0	71	126	224	52	9.2	15	7.2
23	2.0	5.7	6.0	6.5	8.0	43	126	227	49	15	13	6.6
24	2.5	5.5	6.0	6.5	8.0	42	170	229	47	110	93	6.0
25	3.5	6.0	7.0	6.5	9.0	44	195	223	47	17	22	5.7
26	3.2	6.0	7.5	7.0	8.0	33	133	218	53	15	19	9.6
27	3.5	6.0	7.5	7.0	7.5	31	115	206	46	14	15	13
28	3.5	5.5	7.0	6.5	8.5	23	97	198	40	13	9.6	7.8
29	2.8	6.0	6.5	6.5	10	28	119	186	34	15	9.6	6.9
30	3.5	6.5	6.0	7.0	---	32	118	176	32	14	7.2	6.9
31	3.5	---	6.0	7.0	---	33	---	170	---	13	6.6	---
TOTAL	189.9	172.8	197.0	216.0	242.0	1081	3499	6765	2772	582.4	1042.21	215.7
MEAN	6.13	5.76	6.35	6.97	8.34	34.9	117	218	92.4	18.8	33.6	7.19
MAX	44	11	7.5	8.0	10	82	234	312	190	110	151	17
MIN	2.0	3.0	5.0	6.0	7.0	11	24	123	32	7.5	.91	3.5
AC-FT	377	343	391	428	480	2140	6940	13420	5500	1160	2070	428

CAL YR 1983 TOTAL 22133.70 MEAN 60.6 MAX 663 MIN 2.0 AC-FT 43900
WTR YR 1984 TOTAL 16975.01 MEAN 46.4 MAX 312 MIN .91 AC-FT 33670

NOTE.--NO GAGE-HEIGHT RECORD DEC. 5 TO MAR. 1.

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK,CO.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March to September 1984 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March to September 1984.
WATER TEMPERATURES: March to September 1984.

INSTRUMENTATION.--Water-quality monitor from March to September 1984.

REMARKS.--Daily maximum and minimum specific conductance and water temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
MAR 01...	1300	15	3120	8.6	1.5	1200	240	150	320	4
APR 03...	1030	18	3600	8.1	8.0	--	--	--	--	--
MAY 01...	1725	116	1950	7.3	12.0	930	190	110	170	2
JUN 11...	1300	102	1200	7.7	15.0	--	--	--	--	--
JUL 24...	1100	10	4430	7.6	21.0	1500	280	200	490	6
AUG 15...	1340	21	2940	7.6	19.5	--	--	--	--	--
SEP 14...	1450	3.8	3620	7.4	22.0	1800	390	210	340	4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
MAR 01...	7.3	227	1500	55	.40	7.0	2640	2400	3.6	107
APR 03...	--	--	--	--	--	--	2640	--	3.6	128
MAY 01...	5.4	226	950	23	.30	8.6	1720	1600	2.3	539
JUN 11...	--	--	--	--	--	--	968	--	1.3	267
JUL 24...	9.7	186	2300	71	.40	8.0	--	3500	4.7	94
AUG 15...	--	--	--	--	--	--	2950	--	4.0	167
SEP 14...	8.5	195	2200	57	.30	8.3	3470	3300	4.7	36

DOLORES RIVER BASIN

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK,CO.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	---	1890	1240	2080	---	2720
2						---	---	1780	---	2190	---	2800
3						---	---	1730	---	2290	---	2860
4						---	3110	1520	---	2400	---	2930
5						---	2870	1460	---	2500	---	3000
6						3440	2460	1460	---	2590	---	3060
7						3420	2380	1420	---	2720	---	3130
8						3400	2130	1460	---	2840	---	3210
9						3380	2150	1370	---	2950	---	3270
10						3370	2350	1330	1310	3020	---	3340
11						3350	2280	1320	1270	3080	---	3400
12						3330	2380	1330	---	3270	---	3480
13						3320	2080	1340	---	3630	---	3550
14						3280	1880	1320	---	3580	---	3590
15						3200	1770	1340	---	3710	---	3470
16						---	1660	1420	---	3670	2680	3410
17						---	1590	1320	---	3880	2570	3620
18						---	1500	1270	---	3900	2680	3730
19						---	1550	1290	---	4260	2720	3760
20						---	1770	1220	---	4570	2690	3790
21						---	1900	1200	---	4480	2300	3830
22						---	1920	1150	---	4540	2390	3830
23						---	1860	1060	---	5140	2470	3870
24						---	1570	1080	---	4230	2250	3880
25						---	1500	1020	---	3550	2160	3900
26						---	1730	997	---	3300	2270	3930
27						---	1830	1010	---	---	2370	3920
28						---	1880	987	---	---	2450	3940
29						---	1980	1000	1700	---	2520	3950
30						---	1950	986	1980	---	2580	3950
31						---	---	1030	---	---	2650	---
MEAN						3350	2000	1290	1500	3400	2480	3500

WTR YR 1984 MEAN 2540 MAX 5140 MIN 986

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK,CO.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											1.0	---
6											1.5	.5
7											3.0	1.0
8											4.0	2.0
9											5.0	2.5
10											5.5	3.5
11											6.0	4.0
12											7.5	4.0
13											9.0	5.5
14											11.0	6.5
15											13.0	7.0
16											---	---
17											---	---
18											---	---
19											---	---
20											---	---
21											---	---
22											---	---
23											---	---
24											---	---
25											---	---
26											---	---
27											---	---
28											---	---
29											---	---
30											---	---
31											---	---
MONTH											13.0	.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	12.5	5.5	15.5	10.0	26.5	14.5	---	---	20.5	18.5
2	---	---	11.0	6.5	---	---	27.0	15.0	---	---	20.0	16.5
3	12.0	---	12.5	4.5	---	---	26.5	15.5	---	---	21.0	17.0
4	14.5	.5	12.0	7.5	---	---	27.5	15.0	---	---	21.5	17.0
5	14.0	2.5	11.5	6.0	---	---	28.5	14.5	---	---	22.0	17.0
6	11.5	3.0	12.5	5.5	---	---	28.5	15.5	---	---	21.0	17.5
7	11.0	4.0	12.0	4.0	---	---	28.5	17.0	---	---	20.5	17.0
8	13.0	1.5	13.5	3.5	---	---	25.0	17.5	---	---	21.0	16.5
9	5.5	1.5	13.5	5.0	16.5	---	28.0	17.5	---	---	21.5	16.5
10	11.5	.5	14.5	6.0	18.0	9.0	28.5	18.0	---	---	21.0	17.0
11	9.5	3.5	15.5	7.0	18.0	10.0	28.0	16.0	---	---	21.0	18.5
12	12.5	1.5	15.0	7.5	---	---	26.5	15.5	---	---	22.0	18.0
13	12.5	3.0	13.0	8.0	---	---	25.5	17.0	---	---	21.5	17.5
14	12.0	2.0	15.5	8.5	---	---	26.0	18.5	---	---	23.0	17.0
15	13.0	2.5	13.0	9.0	---	---	29.0	17.5	20.0	---	24.0	16.5
16	13.5	2.5	13.5	7.5	---	---	29.5	17.0	24.0	16.0	19.0	17.0
17	13.0	3.5	14.0	6.5	---	---	29.0	15.0	22.0	16.0	20.0	16.5
18	12.0	5.5	13.0	8.0	---	---	27.5	16.5	23.5	16.5	20.5	17.0
19	7.5	4.0	15.0	7.5	---	---	30.5	15.5	24.0	18.0	21.0	17.5
20	6.0	2.0	15.5	8.0	---	---	29.5	18.0	23.0	17.0	20.0	17.0
21	9.0	2.5	14.5	8.5	---	---	29.0	18.5	23.0	14.5	19.5	17.0
22	12.0	3.0	16.5	8.5	---	---	27.0	18.5	25.5	15.5	19.0	15.5
23	14.0	4.0	16.0	9.0	---	---	25.5	18.5	24.0	17.5	18.0	16.0
24	14.0	5.0	16.0	9.5	---	---	25.5	7.0	23.0	15.5	18.0	15.5
25	7.5	2.5	16.0	9.0	---	---	27.0	14.0	23.0	16.5	17.0	14.5
26	4.5	1.0	16.0	8.0	---	---	23.5	16.0	22.5	17.5	16.5	14.5
27	6.5	.0	16.0	8.5	---	---	---	17.0	22.5	17.5	17.0	13.5
28	2.0	.5	16.0	8.0	26.0	---	---	---	22.5	17.5	16.5	13.5
29	11.5	.5	17.0	8.5	26.5	15.5	---	---	22.0	18.0	15.5	12.0
30	10.0	3.5	16.0	9.5	21.0	16.0	---	---	22.0	18.0	15.0	11.0
31	---	---	13.5	11.0	---	---	---	---	21.5	18.5	---	---
MONTH	14.5	.0	17.0	3.5	26.5	9.0	30.5	7.0	25.5	14.5	24.0	11.0
YEAR	30.5	.0										

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi southeast of Bedrock, and 3.1 mi upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 5,000 acres above station and about 74,760 acres in the San Juan River basin. Flow partly regulated by McPhee Reservoir since Mar. 19, 1984 , capacity 381,00 acre-ft.

AVERAGE DISCHARGE.--17 years (water years 1918-22, 1972-83), 497 ft^3/s; 360,100 acre-ft/yr, prior to completion of McPhee Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft^3/s, Apr. 30, 1973, gage height, 12.09 ft, from floodmarks, from rating curve extended above 8,700 ft^3/s; no flow, Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft, present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft^3/s at 1130 Apr. 18, gage height, 9.11 ft; minimum daily, 18 ft^3/s, Oct. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	21	31	103	131	115	142	1320	3720	714	80	158
2	66	21	32	87	120	120	127	1460	3540	694	76	141
3	171	21	38	90	110	150	124	1520	3250	638	71	186
4	295	21	42	100	100	162	109	1540	2910	461	80	98
5	248	20	39	120	100	160	100	1750	2380	353	182	91
6	212	20	30	110	110	142	100	2430	2050	270	222	86
7	176	19	36	110	110	131	154	2820	2030	210	235	79
8	100	23	35	120	110	127	242	2660	2130	162	212	98
9	64	31	32	130	110	148	380	2520	2140	118	189	225
10	47	34	32	120	120	162	805	2720	1830	100	180	228
11	45	35	32	130	130	200	1570	3310	1640	91	180	174
12	32	32	34	110	110	255	1480	3550	1420	87	191	89
13	28	28	35	100	110	222	1420	3620	1180	87	245	72
14	26	27	35	117	130	230	1450	3660	1170	89	248	70
15	25	25	37	100	130	262	1790	3650	1390	118	532	71
16	25	29	32	85	110	300	2290	3740	1440	90	335	370
17	24	29	34	65	136	350	3090	3790	1430	76	512	117
18	23	34	35	75	136	386	3810	3790	1420	75	467	109
19	22	35	32	66	114	407	3620	3810	1290	71	464	93
20	22	35	34	89	104	380	3570	3820	1090	65	506	86
21	20	38	91	80	117	238	2790	3790	1020	62	962	91
22	20	37	86	91	110	164	2540	3790	1000	68	722	80
23	21	33	91	94	114	260	2350	3880	985	109	638	75
24	19	37	104	125	101	220	2120	3860	980	144	1440	72
25	19	41	120	156	115	168	2140	3940	970	115	835	75
26	19	37	131	152	122	189	2460	3960	855	180	340	77
27	19	32	146	148	101	200	2480	4100	750	150	252	77
28	19	34	166	142	104	166	1920	4110	734	107	302	76
29	18	33	131	142	114	138	1370	4090	795	86	318	79
30	19	30	107	138	---	115	1240	3850	666	93	312	76
31	19	---	106	136	---	115	---	3750	---	86	222	---
TOTAL	2026	892	1966	3431	3329	6382	47783	100600	48205	5769	11550	3419
MEAN	65.4	29.7	63.4	111	115	206	1593	3245	1607	186	373	114
MAX	295	41	166	156	136	407	3810	4110	3720	714	1440	370
MIN	18	19	30	65	100	115	100	1320	666	62	71	70
AC-FT	4020	1770	3900	6810	6600	12660	94780	199500	95610	11440	22910	6780

CAL YR 1983 TOTAL 360114 MEAN 987 MAX 8000 MIN 10 AC-FT 714300
WTR YR 1984 TOTAL 235352 MEAN 643 MAX 4110 MIN 18 AC-FT 466800

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1979 to current year.
WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979.

REMARKS.--Daily maximum and minimum specific-conductance and water-temperatures data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,790 micromhos July 12, 1981; minimum, 140 micromhos May 25, 1983.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 7, 1981; minimum, -0.5°C Dec. 3-8, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,660 micromhos Dec. 21; minimum, 192 micromhos June 1,2.
WATER TEMPERATURES: Maximum, 28.5°C July 20; minimum, 0.0°C many days during winter months.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1620	1830	1160	836	1240	1340	591	204	370	1170	623
2	1110	1690	1840	1230	852	1270	1360	526	205	346	1220	623
3	1160	1660	1960	1230	880	1240	1380	505	216	350	1250	625
4	1470	1660	2000	1130	918	1200	1420	483	224	373	1270	650
5	757	1670	1940	1150	920	1240	1500	442	238	435	1300	661
6	625	1680	2050	1190	938	1260	1670	417	279	472	1250	677
7	594	1690	1940	1170	939	1400	1560	400	342	531	1210	689
8	650	1690	1690	1100	951	1280	1600	395	331	604	1190	701
9	745	1650	1650	1120	956	1310	1270	401	351	687	1280	708
10	805	1770	1760	1170	959	1280	992	403	327	752	1660	692
11	851	2000	1960	1150	950	1270	495	380	343	826	1780	658
12	900	2260	1950	1110	956	1260	464	391	338	841	1730	651
13	920	2100	1930	1150	972	1300	464	404	379	863	1750	660
14	951	2070	1940	1070	1020	1300	462	409	386	888	1810	680
15	978	2020	1980	1010	993	1220	457	402	336	908	1870	698
16	992	1970	2080	1100	980	1240	448	353	307	812	1220	493
17	1050	1870	2060	1110	1010	1250	443	307	307	888	1340	620
18	1080	1950	2040	1090	1080	1260	435	307	304	865	1390	712
19	1110	2080	2030	1130	1080	1270	446	303	305	816	1390	714
20	1130	2060	2030	1230	1060	1260	465	305	320	773	1320	731
21	1180	2190	2520	1280	1160	1200	489	308	338	757	1230	726
22	1250	2310	2850	1120	1110	1140	505	307	343	807	1150	1040
23	1300	2270	2110	1110	1140	1120	522	287	340	728	1120	1220
24	1350	2330	2040	1160	1100	1240	540	---	332	765	1000	1100
25	1370	2330	1440	1090	1040	1310	559	---	328	585	899	987
26	1360	2390	1280	931	1140	1300	568	---	331	584	821	888
27	1380	2410	1160	792	1120	1300	579	---	---	540	776	854
28	1390	2430	1190	790	1170	1310	587	---	---	1170	733	860
29	1380	2420	1090	788	1210	1330	600	---	370	1480	694	868
30	1380	1990	1040	799	---	1330	613	---	347	1440	654	994
31	1460	---	1110	819	---	1320	---	---	---	1310	625	---
MEAN	1110	2010	1820	1080	1020	1270	808	392	313	760	1230	760

WTR YR 1984 MEAN 1070 MAX 2850 MIN 204

DOLORES RIVER BASIN

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	13.0	12.5	9.0	1.5	.5	.5	.0	.0	.0	3.0	.0
2	14.0	12.5	11.5	9.5	2.0	1.0	.0	.0	.0	.0	5.5	1.0
3	13.5	11.0	11.5	8.0	3.0	1.5	.0	.0	.0	.0	5.0	3.5
4	14.5	11.5	11.0	7.5	3.5	2.0	.0	.0	.0	.0	4.0	3.0
5	14.5	11.5	10.5	8.0	2.0	.0	.5	.0	.0	.0	4.0	1.5
6	16.5	13.0	10.5	7.0	1.0	.0	.5	.0	.0	.0	4.0	1.5
7	15.5	13.0	9.5	7.0	1.0	.0	.5	.0	.0	.0	4.5	1.0
8	15.5	13.0	8.5	6.0	1.0	.0	.5	.0	.0	.0	5.5	2.5
9	16.5	13.0	6.5	4.0	1.0	.0	1.0	.0	.0	.0	7.0	4.0
10	16.5	13.5	6.5	4.0	1.5	.0	.0	.0	.0	.0	7.5	5.0
11	15.5	12.5	5.5	4.0	1.0	.0	.0	.0	.0	.0	7.0	6.5
12	14.5	11.0	6.0	4.0	2.5	.0	.0	.0	.0	.0	7.5	5.0
13	14.0	10.5	6.5	4.5	1.5	.0	.0	.0	.0	.0	9.0	5.5
14	13.0	11.0	7.0	5.0	1.0	.0	.0	.0	.0	.0	8.0	7.0
15	13.0	9.5	5.0	3.0	1.5	.0	.0	.0	1.0	.0	8.5	6.5
16	13.0	9.0	3.5	2.0	1.0	.0	.0	.0	1.5	.0	9.5	7.0
17	12.0	9.5	3.5	1.5	1.0	.0	.0	.0	1.5	.0	8.0	6.5
18	14.0	10.0	4.0	2.5	1.0	.0	.0	.0	1.5	.0	7.0	5.5
19	12.0	10.0	3.5	1.0	1.5	.5	.0	.0	1.0	.0	8.0	5.0
20	12.0	8.0	3.0	2.0	1.5	.0	.0	.0	1.5	.0	8.5	5.0
21	12.0	7.5	3.0	2.0	.0	.0	.0	.0	1.5	.0	10.0	6.0
22	12.0	7.5	3.0	1.0	.0	.0	.0	.0	2.0	.0	9.5	7.5
23	11.5	7.5	2.0	.0	.0	.0	.0	.0	1.5	.0	9.5	5.5
24	11.5	8.0	1.0	.0	.5	.0	.0	.0	1.5	.0	10.0	6.5
25	12.5	8.0	1.0	.0	.5	.0	.0	.0	.5	.0	9.0	8.0
26	12.0	8.0	1.0	.0	2.0	.5	.0	.0	2.0	.0	7.5	6.0
27	12.0	8.0	1.0	.0	3.5	2.0	.0	.0	2.0	.0	8.0	5.0
28	12.5	8.5	1.0	.0	3.0	.0	.0	.0	2.5	.0	8.5	5.0
29	12.5	8.5	1.0	.0	.0	.0	.0	.0	3.0	.0	9.5	7.0
30	11.5	9.5	1.5	.0	.0	.0	.0	.0	---	---	9.0	8.0
31	12.0	9.0	---	---	.5	.0	.0	.0	---	---	9.5	7.0
MONTH	16.5	7.5	12.5	.0	3.5	.0	1.0	.0	3.0	.0	10.0	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	6.5	11.0	9.0	13.5	12.0	21.5	18.5	26.0	21.5	24.0	20.5
2	8.5	5.5	11.0	10.0	14.5	12.0	23.0	19.0	26.0	22.0	23.0	19.5
3	10.5	6.5	12.0	10.0	15.5	13.0	23.5	20.0	27.0	21.5	23.5	19.0
4	11.0	7.5	12.5	10.5	14.5	13.5	24.0	20.0	25.0	21.5	24.5	19.5
5	12.0	7.5	12.5	11.0	14.0	13.0	24.5	20.0	24.0	22.0	24.0	19.0
6	11.0	8.5	12.0	10.5	13.5	12.0	25.5	21.0	24.5	21.0	23.0	19.5
7	12.5	8.5	11.0	9.5	13.5	12.0	26.0	22.5	25.0	21.5	22.5	18.5
8	13.5	9.5	11.0	8.5	13.5	13.0	24.5	22.5	25.5	21.5	23.5	18.5
9	12.5	9.5	12.0	8.5	15.5	13.0	25.0	21.5	26.0	22.0	22.5	19.0
10	11.0	8.0	13.0	10.0	16.5	14.0	27.0	22.0	26.0	22.0	22.5	19.0
11	9.0	7.0	13.0	11.0	17.0	16.0	27.0	21.5	25.5	22.0	21.5	20.0
12	9.0	7.0	13.0	11.5	18.5	16.0	26.5	22.0	25.5	23.0	23.0	19.5
13	9.5	7.0	12.5	11.0	19.5	16.5	25.0	22.5	25.5	22.0	22.0	18.5
14	10.0	8.5	13.0	11.0	20.0	17.0	25.5	22.0	26.0	22.5	23.0	18.5
15	9.5	8.0	12.5	11.5	19.0	17.5	26.5	22.0	24.5	22.5	22.5	19.0
16	10.0	8.0	13.0	11.5	18.0	16.5	28.0	22.5	23.5	21.0	19.5	16.5
17	9.5	8.0	12.5	11.0	18.0	15.5	27.5	22.0	25.0	22.0	22.0	17.0
18	10.5	8.5	12.0	10.5	17.0	15.5	27.5	22.5	24.5	21.0	23.0	18.0
19	9.5	9.0	12.0	10.5	18.0	16.5	27.5	22.0	24.5	22.0	23.0	19.0
20	9.0	7.5	13.0	11.0	20.0	17.0	28.5	23.5	23.0	21.5	21.5	19.0
21	9.0	8.0	13.0	11.5	20.0	16.5	27.5	23.5	21.5	19.5	21.0	18.0
22	9.0	7.0	13.5	11.5	20.0	16.0	26.5	23.0	22.0	18.5	20.0	17.0
23	10.0	7.5	13.5	12.0	20.0	16.0	25.0	19.5	21.5	20.0	19.0	16.0
24	11.0	9.0	---	---	19.5	16.5	24.0	21.5	21.0	19.0	17.5	14.0
25	11.0	9.0	---	---	19.0	17.0	24.5	20.5	21.5	19.5	16.5	13.0
26	9.0	6.5	---	---	21.0	16.5	26.0	22.5	23.5	19.5	14.5	13.0
27	7.5	6.0	---	---	---	17.5	25.5	23.0	24.5	20.0	18.0	13.0
28	7.0	6.5	---	---	22.0	18.0	27.0	23.0	25.0	21.0	17.5	13.5
29	8.0	5.5	---	---	22.0	19.0	27.0	23.5	24.5	21.5	16.5	12.5
30	10.5	7.5	---	---	20.5	19.0	27.0	21.5	24.0	20.5	15.0	11.0
31	---	---	14.0	---	---	---	26.0	23.0	24.0	21.0	---	---
MONTH	13.5	5.5	14.0	8.5	22.0	12.0	28.5	18.5	27.0	18.5	24.5	11.0
YEAR	28.5	.0										

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi downstream from West Paradox Creek and 4.3 mi northeast of Bedrock.

DRAINAGE AREA.--2,145 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft, from topographic map. Prior to Feb. 1, 1972, at site 400 ft upstream at datum 1.02 ft, higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 80,000 acres, of which about 74,760 acres are in the San Juan River basin. Flow partly regulated by McPnee Reservoir, capacity 381,000 acre-ft, since Mar. 19, 1984 .

AVERAGE DISCHARGE.--12 years (water years 1972-83), 502 ft^3/s; 363,700 acre-ft/yr, prior to completion of McPhee Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft^3/s, Apr. 30, 1973, gage height, 12.88 ft, from floodmarks; minimum daily, 0.12 ft^3/s, July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft, site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft^3/s), by slope-area measurement at site 1,400 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,160 ft^3/s at 1400 Apr. 18, gage height, 10.65 ft; minimum daily, 26 ft^3/s, Nov.4

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	28	43	111	149	123	150	1260	3900	644	88	163
2	82	31	46	88	129	126	140	1420	3850	680	86	132
3	135	27	50	93	116	151	130	1510	3410	652	80	188
4	303	26	55	111	108	163	124	1540	3010	464	75	111
5	262	27	52	127	112	165	111	1750	2340	363	169	96
6	220	27	40	112	116	149	105	2520	2000	282	225	90
7	192	28	50	116	116	147	137	3040	1940	220	238	82
8	122	33	50	123	123	141	242	2750	2090	163	220	81
9	80	39	46	134	122	147	357	2580	2100	129	195	215
10	59	41	49	129	129	163	791	2840	1840	108	185	228
11	53	41	49	132	137	198	1920	3700	1630	99	188	200
12	45	43	50	120	124	258	1750	4020	1480	96	192	108
13	39	38	51	105	117	242	1700	4060	1240	88	222	80
14	37	38	49	126	141	230	1860	4030	1180	92	282	75
15	35	34	51	118	141	272	2230	4010	1410	105	495	75
16	36	35	49	88	122	312	2730	4000	1460	116	365	434
17	35	38	48	65	137	357	3690	4190	1460	87	460	149
18	33	43	50	95	137	402	4300	4210	1450	84	504	123
19	31	47	48	120	117	420	4140	4200	1350	81	488	114
20	31	46	47	149	108	402	4080	4180	1140	75	492	102
21	30	47	85	185	117	280	3080	4150	1030	69	1100	117
22	29	48	94	185	128	173	2680	4120	1020	125	780	104
23	30	46	98	192	114	260	2390	4230	1010	96	636	96
24	29	45	117	180	110	250	2150	4240	1000	161	1800	92
25	28	52	130	258	120	180	2140	4280	990	123	885	84
26	28	52	139	255	126	188	2590	4350	905	167	366	94
27	27	40	155	222	116	222	2640	4430	755	180	260	93
28	27	46	175	190	116	190	1980	4440	735	128	298	92
29	27	52	143	171	123	160	1440	4430	780	99	321	93
30	27	42	110	161	---	130	1210	4180	755	108	312	92
31	27	---	108	149	---	130	---	3830	---	92	240	---
TOTAL	2318	1180	2327	4410	3571	6731	52987	108490	49260	5976	12247	3803
MEAN	74.8	39.3	75.1	142	123	217	1766	3500	1642	193	395	127
MAX	303	52	175	258	149	420	4300	4440	3900	680	1800	434
MIN	27	26	40	65	108	123	105	1260	735	69	75	75
AC-FT	4600	2340	4620	8750	7080	13350	105100	215200	97710	11850	24290	7540

CAL YR 1983 TOTAL 372210 MEAN 1020 MAX 7310 MIN 20 AC-FT 738300
WTR YR 1984 TOTAL 253300 MEAN 692 MAX 4440 MIN 26 AC-FT 502400

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to current year.
WATER TEMPERATURES: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1979.

REMARKS.--Daily maximum and minimum specific-conductance and water-temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 83,300 micromhos Aug. 9, 1981; minimum, 103 micromhos June 4, 1984.
WATER TEMPERATURES: Maximum, 33.5°C July 10, 1981; minimum, -1.5°C several days during November to January each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 21,100 micromhos Dec. 6; minimum, 103 micromhos June 4.
WATER TEMPERATURES: Maximum, 32.0°C July 20; minimum, 0.0°C many days during November through March.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2070	15100	11400	3470	3230	3080	4000	661	487	499	---	---
2	4580	14600	10800	4710	3200	3030	4230	646	514	457	---	---
3	4640	15400	9950	4460	3240	2640	4470	619	350	465	---	---
4	2170	15200	9670	3970	3370	2340	4870	584	153	634	---	---
5	1550	15300	9850	3290	3340	2220	5370	562	166	909	---	4150
6	1560	15400	11700	3110	3350	2340	5670	556	224	1220	---	4350
7	1870	15900	7590	3100	3380	2390	3910	542	301	1660	---	4500
8	2870	14100	6680	2840	3240	2410	2160	426	212	2350	---	4480
9	4800	10300	7400	2760	3160	2310	1540	401	246	3170	---	2550
10	6710	9990	7090	3010	3040	2070	1150	523	279	4280	---	2080
11	7390	10300	7000	3050	2700	1810	1040	441	370	4850	---	1880
12	9100	10100	7100	3230	2750	1440	1000	382	393	4660	---	3050
13	10800	12100	6790	3850	2860	1440	979	384	444	4850	---	3900
14	11500	12000	7680	3070	2580	1570	860	402	460	4590	---	4100
15	11800	12600	7380	3000	2400	1480	737	409	340	3770	---	4200
16	12300	12400	7840	3680	3080	1460	656	430	312	2870	---	1800
17	12800	11500	8140	4570	2560	1460	605	412	293	4240	---	2050
18	13600	10900	8070	3690	2550	1440	613	394	291	4270	---	3650
19	14100	9570	9200	4440	2990	1460	633	381	300	4450	---	4420
20	14300	10000	9130	4320	3310	1470	661	373	358	4680	---	5170
21	14700	9810	6230	4100	3270	1580	676	354	401	5390	---	4620
22	15200	9300	5020	3910	2980	1940	604	335	413	3800	2500	5320
23	15500	10200	4140	3440	3180	1990	591	343	413	---	1650	6200
24	15600	10300	3600	3390	3490	2070	581	336	410	---	1450	6120
25	15600	9250	2910	2580	3150	2300	588	405	406	---	1450	5940
26	15700	9480	2700	2370	3070	2440	600	419	425	---	1780	5220
27	15800	11900	2530	2380	3310	2420	607	444	481	---	1780	5260
28	15500	10500	2280	2580	3310	2650	602	435	497	---	---	5250
29	15800	9350	2670	2740	3100	3000	625	424	461	---	---	5070
30	16200	11400	3690	2910	---	3400	637	320	428	---	---	4950
31	15800	---	3850	3060	---	3800	---	251	---	---	---	---
MEAN	10400	11800	6780	3390	3080	2180	1710	439	361	3090	1770	4240

WTR YR 1984 MEAN 4310 MAX 16200 MIN 153

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	12.0	15.0	7.5	3.0	1.0	3.5	.0	.0	.0	5.0	.0
2	15.5	11.5	14.0	8.5	4.5	2.0	2.0	.0	1.0	.0	7.5	.0
3	16.5	9.5	15.0	6.0	5.0	2.0	2.0	.0	1.5	.0	6.0	2.5
4	16.0	11.0	14.5	5.0	5.5	3.0	3.0	.0	2.5	.0	5.0	1.5
5	16.5	11.5	13.0	6.5	4.5	.0	2.5	.0	3.0	.0	6.5	.0
6	18.5	12.5	14.0	5.0	3.0	.0	2.5	.0	3.0	.0	7.0	.0
7	17.0	12.0	12.0	5.5	4.0	.0	3.0	.0	2.5	.0	7.0	.0
8	18.5	11.5	9.5	5.5	3.0	.0	3.0	.0	2.5	.0	7.5	.0
9	19.0	12.0	10.0	2.5	3.5	.0	2.0	.0	2.5	.0	9.0	.5
10	20.5	11.5	11.0	4.5	5.0	.0	2.0	.0	1.5	.0	9.5	1.5
11	18.0	10.5	8.0	4.0	3.5	.0	.5	.0	3.5	.0	7.5	3.5
12	18.0	8.0	10.0	4.5	4.5	.0	1.0	.0	3.0	.0	8.0	2.5
13	17.0	8.0	10.0	5.0	3.5	.0	.0	.0	4.5	.0	8.5	3.5
14	14.0	9.0	10.5	5.0	3.5	.0	.0	.0	2.5	.0	7.0	4.5
15	15.5	7.5	8.5	2.0	4.5	.0	1.0	.0	4.0	.0	8.0	4.0
16	16.5	6.0	7.0	1.5	3.5	.0	.0	.0	5.5	.0	9.5	5.0
17	15.0	7.0	7.0	.5	3.5	1.0	.0	.0	5.0	.0	6.0	4.0
18	17.0	8.5	6.0	3.0	4.0	.5	.0	.0	4.5	.0	5.5	3.5
19	13.5	7.0	7.5	.5	5.0	1.0	.0	.0	5.0	.0	8.0	2.5
20	14.5	5.0	5.0	2.0	4.0	.0	.0	.0	6.0	.0	9.0	3.0
21	15.5	5.0	5.0	2.5	2.0	.0	.0	.0	6.5	.0	11.0	4.5
22	15.0	4.5	5.0	1.0	2.0	.0	.0	.0	4.5	.0	11.0	5.5
23	14.5	4.5	5.5	.0	3.0	.0	.0	.0	5.0	.0	10.0	4.0
24	14.0	6.0	4.0	.0	3.0	.0	.0	.0	5.0	.0	11.0	5.0
25	16.0	6.0	3.0	.5	2.0	1.0	.0	.0	2.0	.0	9.5	6.0
26	15.5	5.5	2.0	.0	3.5	1.5	.0	.0	4.5	.0	7.5	5.0
27	15.5	5.5	4.0	.0	5.0	3.0	.0	.0	5.5	.0	9.0	4.5
28	16.0	7.0	4.5	.0	4.0	.0	.0	.0	6.0	.0	11.5	3.5
29	16.0	6.5	5.5	.0	1.5	.0	.0	.0	6.5	.0	12.0	5.5
30	14.0	8.0	5.0	.0	3.0	.0	.0	.0	---	---	10.0	6.5
31	16.0	8.5	---	---	3.0	.0	.0	.0	---	---	10.5	6.0
MONTH	20.5	4.5	15.0	.0	5.5	.0	3.5	.0	6.5	.0	12.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	5.5	10.5	8.5	14.0	14.0	24.0	19.0	27.5	19.5	---	---
2	10.0	4.5	11.5	9.0	14.0	13.5	24.5	19.5	28.5	20.0	---	---
3	13.0	4.5	12.0	9.0	16.5	14.0	25.0	20.5	30.0	19.5	---	---
4	15.0	4.5	12.5	10.0	15.5	14.0	26.5	20.5	26.5	19.0	---	---
5	15.0	5.5	13.0	10.5	14.5	13.5	27.5	20.5	24.5	20.0	---	---
6	12.5	7.0	12.0	11.0	14.0	12.0	28.5	21.5	26.0	20.0	---	---
7	14.5	7.5	11.5	9.5	14.0	11.5	29.5	22.5	26.5	20.0	---	---
8	15.5	8.5	11.5	8.5	13.0	12.5	27.0	22.5	27.0	20.0	---	---
9	12.0	9.0	12.0	9.0	15.0	12.0	27.5	21.0	28.0	20.5	---	---
10	11.5	7.5	13.0	10.0	16.0	13.0	30.0	21.0	28.0	20.5	---	---
11	9.0	7.5	12.5	11.0	17.0	14.5	30.5	20.5	27.5	20.5	---	---
12	8.5	7.5	12.5	10.5	18.5	15.0	28.0	20.5	28.0	21.0	---	---
13	9.0	7.5	12.0	10.5	20.0	16.0	27.0	20.5	27.0	21.5	---	---
14	10.0	7.5	12.5	11.5	20.0	16.0	27.5	20.5	27.0	21.5	25.5	---
15	9.5	7.5	12.5	12.0	20.0	17.0	28.5	20.0	26.5	21.5	25.0	17.5
16	9.0	7.5	12.5	12.0	19.0	16.5	31.0	21.0	25.5	21.0	21.0	16.0
17	8.5	7.5	12.5	12.0	18.5	15.0	30.5	20.0	25.0	21.0	24.0	16.0
18	10.5	8.5	12.0	12.0	18.0	15.5	30.5	20.0	25.0	21.5	25.0	17.0
19	9.5	9.0	12.0	12.0	19.5	16.0	31.5	20.0	25.5	21.0	25.5	17.5
20	9.5	8.5	12.0	12.0	21.0	16.5	32.0	21.5	22.0	19.5	24.0	18.0
21	8.5	8.0	12.5	12.0	20.5	17.0	30.0	22.0	21.0	18.0	23.0	17.5
22	9.0	7.0	13.0	12.5	21.0	16.5	28.0	21.0	21.5	19.0	23.0	15.5
23	10.0	7.0	13.0	12.5	21.5	17.0	27.0	21.5	---	---	23.0	15.5
24	11.0	8.5	13.5	13.0	20.5	17.0	29.5	20.0	---	---	21.5	14.0
25	10.5	8.5	13.5	13.0	20.5	18.0	27.0	20.0	---	---	19.0	11.5
26	8.5	6.0	13.5	13.5	22.5	18.0	29.5	21.0	---	---	13.5	12.0
27	7.0	5.5	13.5	13.5	23.0	18.5	28.0	23.0	---	---	20.5	12.0
28	7.0	6.0	14.0	13.5	23.5	19.5	30.5	22.0	---	---	19.5	11.0
29	8.5	5.0	14.0	13.5	23.5	19.5	30.5	22.0	---	---	19.5	9.0
30	10.0	6.5	14.0	14.0	22.0	20.0	31.0	22.5	---	---	19.0	8.5
31	---	---	14.0	14.0	---	---	28.5	22.0	---	---	---	---
MONTH	15.5	4.5	14.0	8.5	23.5	11.5	32.0	19.0	30.0	18.0	25.5	8.5
YEAR	32.0	.0										

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.7 mi downstream from Specie Creek and 4.0 mi northwest of Placerville.

DRAINAGE AREA.--308 mi².

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,055.80 ft, (U.S. Bureau of Reclamation bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Records good except those for winter period and those for periods of no gage-height record, which are poor. Diversions for irrigation of about 1,700 acres above station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co., combined capacity, 5,040 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years (water years 1911-12, 1931-34, 1943-84), 233 ft³/s; 168,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s, Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 24	2100	1,520	4.69	June 16	0200	1,380	7.47
May 14	1900	*2,780	7.24	June 27	0330	1,480	7.63
May 24	2330	2,120	8.58				

Minimum daily discharge, 55 ft³/s, Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	92	92	70	80	72	95	330	1730	1230	375	300
2	198	92	92	70	75	72	90	400	1540	1170	348	280
3	189	92	85	65	75	72	100	410	1400	1140	330	250
4	183	88	85	60	75	65	120	590	1240	1100	357	230
5	177	88	76	70	75	65	170	788	1210	1020	336	220
6	159	88	69	70	75	65	270	796	1070	968	444	200
7	132	88	75	75	70	65	300	910	1120	926	363	190
8	132	115	75	75	70	65	400	967	992	880	328	180
9	129	98	75	75	70	65	280	1190	875	915	308	180
10	126	95	80	70	70	70	230	1400	795	950	315	170
11	129	98	76	70	70	70	330	1610	815	850	295	160
12	126	93	78	70	70	65	230	1760	895	745	312	150
13	123	93	76	70	70	70	270	1940	1050	745	282	150
14	129	98	75	70	70	75	300	2220	1240	715	280	142
15	126	78	78	70	65	85	350	2400	1270	745	280	158
16	123	86	74	70	65	90	450	2200	1270	665	320	228
17	126	86	75	65	70	90	580	1900	1140	600	340	208
18	123	98	78	60	70	95	740	1700	1080	546	390	179
19	120	86	78	60	70	85	760	1330	1110	514	360	179
20	105	88	75	60	65	90	600	1410	1170	522	350	171
21	100	92	70	60	65	110	410	1560	1220	506	410	175
22	93	78	65	60	72	160	385	1740	1240	534	400	175
23	93	81	65	55	75	120	452	1890	1200	490	370	171
24	92	83	70	60	75	100	846	1960	1150	510	390	197
25	92	92	70	65	64	110	989	1950	1220	482	400	175
26	90	83	70	65	63	95	584	1910	1380	466	370	169
27	88	80	70	65	62	95	446	1920	1390	518	320	181
28	90	76	70	70	69	90	405	1850	1350	490	300	167
29	86	74	70	70	70	95	355	1790	1240	470	280	158
30	88	90	65	75	---	95	320	1770	1260	502	260	144
31	93	---	70	80	---	95	---	1660	---	408	250	---
TOTAL	3846	2669	2322	2090	2035	2656	11857	46251	35662	22322	10463	5637
MEAN	124	89.0	74.9	67.4	70.2	85.7	395	1492	1189	720	338	188
MAX	198	115	92	80	80	160	989	2400	1730	1230	444	300
MIN	86	74	65	55	62	65	90	330	795	408	250	142
AC-FT	7630	5290	4610	4150	4040	5270	23520	91740	70740	44280	20750	11180

CAL YR 1983 TOTAL 149399 MEAN 409 MAX 2740 MIN 50 AC-FT 296300
WTR YR 1984 TOTAL 147810 MEAN 404 MAX 2400 MIN 55 AC-FT 293200

NOTE.--NO GAGE-HEIGHT RECORD MAR. 4 TO APR. 20, AUG. 14 TO SEPT. 13.

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft downstream from bridge on State Highway 141, 400 ft downstream from Tabeguache Creek, and 1.5 mi southeast of Uravan.

DRAINAGE AREA.--1,499 mi².

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft, from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years (water years 1955-62, 1974-84), 377 ft³/s; 273,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,050 ft³/s, May 10, 1983, gage height, 10.14 ft, from rating curve extended above 4,100 ft³/s; minimum daily, 9.4 ft³/s, Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft, from floodmarks, discharge, 8,910 ft³/s, by slope-area measurement at site 5.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 19	0230	6,040	8.79	June 7	1900	3,330	6.98
Apr. 25	0400	4,440	7.87	July 22	1530	2,630	6.38
May 11	0600	*6,260	9.41	Aug. 24	1900	3,480	7.11

Minimum daily discharge, 94 ft³/s, Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	141	155	130	120	140	273	1430	2820	1450	445	284
2	273	139	165	120	130	160	273	1730	2620	1320	400	332
3	273	139	160	105	130	180	237	1670	2290	1250	352	273
4	288	137	162	120	140	165	243	2170	2020	1180	372	234
5	258	135	148	140	140	133	288	2940	2000	1100	392	210
6	246	137	110	150	140	123	396	3050	2140	1000	455	204
7	222	135	110	168	150	131	495	2990	2520	968	450	180
8	207	195	120	162	160	133	1000	2790	2650	932	356	160
9	222	213	130	150	150	141	1090	3280	1930	968	324	146
10	204	160	140	135	160	150	665	3780	1640	994	308	134
11	190	162	143	123	140	148	932	4630	1510	974	300	132
12	188	162	145	127	110	143	710	4610	1490	806	358	140
13	182	160	143	123	130	131	800	4620	1500	758	340	140
14	185	162	133	130	150	143	1100	4360	1750	782	270	120
15	190	158	143	120	140	178	1500	5260	1730	842	328	107
16	182	135	135	120	120	237	2230	5440	1690	752	308	407
17	182	141	131	110	140	252	2930	4810	1530	692	356	345
18	182	172	152	110	130	261	3640	4090	1420	602	465	204
19	175	170	143	110	110	222	4180	3210	1380	548	460	178
20	165	143	143	120	117	216	3010	3270	1400	518	450	188
21	158	137	119	120	119	249	2120	3490	1450	518	680	260
22	152	123	125	120	137	376	1670	3510	1490	868	490	210
23	143	94	155	110	129	340	1910	3610	1450	626	430	185
24	143	101	162	110	121	310	2910	3610	1390	596	1460	202
25	143	168	190	110	141	340	3490	3600	1350	530	722	193
26	143	170	192	120	125	316	2090	3400	1600	506	542	182
27	141	139	216	120	119	310	1520	3180	1630	530	435	185
28	141	129	195	120	109	267	1250	3010	1550	536	384	190
29	139	123	131	110	120	270	1090	2940	1430	572	348	175
30	139	135	110	110	---	279	1130	2870	1370	632	300	167
31	141	---	120	120	---	285	---	2670	---	506	238	---
TOTAL	5873	4415	4526	3843	3827	6729	45172	106020	52740	24856	13518	6067
MEAN	189	147	146	124	132	217	1506	3420	1758	802	436	202
MAX	288	213	216	168	160	376	4180	5440	2820	1450	1460	407
MIN	139	94	110	105	109	123	237	1430	1350	506	238	107
AC-FT	11650	8760	8980	7620	7590	13350	89600	210300	104600	49300	26810	12030

CAL YR 1983 TOTAL 272947 MEAN 748 MAX 4980 MIN 90 AC-FT 541400
WTR YR 1984 TOTAL 277586 MEAN 758 MAX 5440 MIN 94 AC-FT 550600

09179200 SALT CREEK NEAR GATEWAY, CO

LOCATION.--Lat 38°31'59", long 108°58'13", in sec.3, T.49 N., R.19 W., Mesa County, Hydrologic Unit 14030004, on left bank 3.5 mi upstream from mouth and 10 mi south of Gate way.

DRAINAGE AREA.--31.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,220 ft, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--5 years, 1.88 ft^3/s; 1,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft^3/s, July 12, 1981, gage height, 13.34 ft, result of slope-area measurement of peak flow; minium daily, 0.02 ft^3/s, Oct. 7, 1979, July 30, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 203 ft^3/s at 0400 Aug. 19, gage height 4.88 ft; no peak above base of 250 ft^3/s; minimum daily, 0.05 ft^3/s, July 10, 11, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.31	.17	.50	.39	.46	.31	.26	.10	.10	.10	.08
2	.09	.36	.22	.60	.50	.41	.40	.31	.12	.10	.10	.08
3	.10	.36	.26	.80	.94	.41	.30	.07	.10	.10	.10	.08
4	.17	.41	.46	.74	.77	.26	.26	.11	.11	.10	.09	.08
5	.17	.41	.36	.72	.94	.50	.29	.14	.36	.11	.10	.08
6	.31	.41	.34	.73	1.3	.94	.31	.14	.17	.10	.10	.09
7	.36	.41	.30	.76	1.3	.17	.21	.16	.26	.08	.10	.10
8	.26	.60	.26	.77	.55	.22	.14	.14	.22	.10	.10	.22
9	.26	.50	.31	.60	.50	.22	.24	.14	.46	.08	.10	.22
10	.31	.50	.31	.52	.60	.17	.29	.15	.22	.05	.11	.22
11	.26	.50	.26	.46	.60	.26	.20	.55	.10	.05	.11	.22
12	.07	.77	.31	.94	.60	.17	.12	.50	.10	.09	.11	.22
13	.31	1.3	.41	1.3	.60	.17	.12	.36	.11	.17	.12	.11
14	.31	1.6	.36	.60	2.5	.22	.22	.31	.11	2.7	.52	.36
15	.29	1.3	.31	.46	1.6	.12	.22	.22	.11	.31	.22	.36
16	.28	1.1	.46	.30	.77	.22	.31	.17	.12	.22	3.6	6.5
17	.33	1.3	.46	.22	.36	.17	.60	.10	.17	.26	.10	.50
18	.29	1.6	.41	.14	.46	.26	.77	.10	.26	6.3	.10	.50
19	.25	1.4	.41	.11	.60	.22	.50	.10	.22	.46	8.6	.50
20	.21	.55	.22	.10	.55	.26	.31	.10	.22	.77	.23	.36
21	.18	.60	.28	.10	.60	.26	.31	.08	.12	.31	.11	.46
22	.17	.41	.77	.14	1.1	.26	.55	.11	.12	.31	.09	.60
23	.17	.41	.94	.18	.77	.26	.50	.11	.17	.31	.77	.60
24	.17	.41	.60	.20	.55	.26	.50	.11	.26	.55	3.1	.60
25	.23	.41	.55	.26	.55	.26	.94	.10	.12	.31	.22	.60
26	.18	.41	.55	.31	.36	.31	.46	.09	.10	.17	.09	.55
27	.14	.55	.60	.46	.41	.26	.41	.09	.10	.08	.09	.55
28	.12	.31	.60	.40	.60	.26	.26	.09	.10	.05	.09	.94
29	.15	.22	.94	.31	.36	.26	.31	.09	.10	.10	.09	.60
30	.19	.22	1.3	.27	---	.41	.26	.07	.10	.09	.09	.60
31	.22	---	.50	.31	---	.26	---	.10	---	.10	.09	---
TOTAL	8.25	19.64	14.23	14.31	21.73	8.89	10.62	5.17	4.93	14.63	19.54	16.98
MEAN	.27	.65	.46	.46	.75	.29	.35	.17	.16	.47	.63	.57
MAX	1.7	1.6	1.3	1.3	2.5	.94	.94	.55	.46	6.3	8.6	6.5
MIN	.07	.22	.17	.10	.36	.12	.12	.07	.10	.05	.09	.08
AC-FT	16	39	28	28	43	18	21	10	9.8	29	39	34

CAL YR 1983 TOTAL 410.51 MEAN 1.12 MAX 82 MIN .07 AC-FT 814
WTR YR 1984 TOTAL 158.92 MEAN .43 MAX 8.6 MIN .05 AC-FT 315

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February to September 1981, April 1982 to current year.
WATER TEMPERATURE: February to September 1981, April 1982 to current year.

INSTRUMENTATION.--Water-quality monitor from February 1981. Pumping sampler since February 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 100,000 micromhos July 4, 1981; minimum, 1,000 micromhos July 8, 11, 1981.
WATER TEMPERATURE: Maximum, 35.0°C June 26, 1981; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 89,200 micromhos Jan. 16; minimum recorded, 2,560 micromhos July 18.
WATER TEMPERATURE: Maximum recorded 30.5°C Aug. 2; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
27...	1200	.13	55400	8.3	4.0	8.2	3400	750	380	13000	99	480
NOV												
29...	1200	.21	53300	8.0	.0	9.1	3300	730	360	13000	100	270
DEC												
21...	1200	.20	55900	8.1	-2.0	10.0	3400	740	380	14000	110	370
JAN												
20...	1200	.08	60000	7.8	-1.0	--	3200	670	380	14000	110	340
APR												
12...	1300	.16	48000	8.4	18.0	6.1	3100	650	370	13000	100	550
MAY												
08...	1400	.14	35100	8.4	20.5	6.0	2200	460	250	8400	80	360
JUN												
11...	1400	.10	57000	8.3	24.0	5.2	3400	720	400	13000	99	590
JUL												
10...	1300	.06	59000	8.3	25.5	4.2	3400	720	400	16000	120	640
AUG												
08...	1400	.10	60000	8.4	29.5	4.9	3600	760	420	17000	130	730
SEP												
05...	1200	.08	60300	8.2	12.0	5.0	3500	770	390	15000	110	640
16...	1400	74	--	--	--	--	1800	590	81	1800	19	67

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT												
27...	210	2300	22000	.40	9.0	39000	53.1	14	.24	<.010	280	440
NOV												
29...	173	2400	24000	.30	8.9	41000	55.6	23	.15	<.010	230	680
DEC												
21...	217	2500	25000	.30	9.2	43000	58.7	23	.19	<.010	250	550
JAN												
20...	222	2200	23000	.30	10	41000	55.4	8.8	.15	<.010	250	630
APR												
12...	174	2300	23000	.40	7.3	40000	54.4	17	.19	<.010	190	250
MAY												
08...	201	1700	14000	.40	11	25000	34.4	9.6	<.10	.030	100	270
JUN												
11...	141	2400	25000	.40	11	42000	57.4	11	.34	.030	150	290
JUL												
10...	149	2600	28000	.50	11	48000	65.9	7.9	.40	<.010	210	10
AUG												
08...	144	2600	28000	.40	8.1	50000	67.5	13	.27	<.010	240	600
SEP												
05...	169	2500	25000	.30	8.6	44000	60.4	9.6	.25	.010	--	--
16...	106	1400	1400	.20	7.0	5400	7.4	1080	.34	<.010	40	210

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL					SEP				
18...	1515	93	144000	36200	16...	1400	74	133000	26600
31...	1100	.04	2170	.23	16...	1415	51	109000	15000

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33700	---	61200	48000	43900	40300	52500		---	61200	55800	
2	43200	---	61300	50200	42400	41000	52100		---	62400	59400	
3	52100	---	58800	48900	41300	37100	51500		---	63900	60400	
4	52900	---	46100	57600	40700	39700	50800		---	64600	60500	
5	53300	---	54500	60000	40400	50000	50800		---	64400	60500	
6	54200	---	53700	59900	40700	51300	51900		---	65000	---	
7	53900	---	51100	60900	43100	51500	52700		---	65600	---	
8	55300	---	54100	63000	55600	54900	51200		---	63200	---	
9	56400	---	54100	63200	66100	53100	51800		---	64100	---	
10	55700	---	53800	66600	67100	53300	50400		---	62100	---	
11	55900	---	53700	65000	67300	52900	49600		---	61600	---	
12	56000	---	53100	66800	68400	52400	47000		52400	63400	---	
13	56700	---	52400	68700	66600	52800	44300		52800	52500	---	
14	57300	---	52700	67400	53900	54500	46300		53700	22500	---	
15	58600	---	50800	72000	50300	56500	48200		52800	27600	---	
16	53800	---	56600	77800	63600	57300	---		48900	33500	---	
17	53900	---	52300	73800	61500	57600	---		49500	36700	---	
18	55600	---	52800	67100	62300	57300	---		51400	28800	---	
19	55800	---	51600	61900	61000	55600	---		53000	17900	---	
	54500	---	52400	59700	59000	55500	---		54500	23300	---	
21	54600	---	51800	60400	60000	56000	---		56500	31400	---	
22	54900	---	53900	59100	60600	55900	---		56600	36300	---	
23	55300	---	53100	57000	61300	55500	---		57600	37900	---	
24	56200	---	54100	54400	61600	55200	---		56600	39800	---	
25	56600	---	54200	49500	62200	55200	---		57900	38100	---	
26	56500	---	54000	46900	62100	55300	---		59000	33900	---	
27	55400	---	49300	46000	61800	54300	---		60300	39400	---	
28	53200	---	53700	44700	60700	53500	---		60700	43700	---	
29	52600	---	61300	44200	58000	53800	---		60800	46300	---	
30	51800	63300	52300	45200	---	55800	---		60000	46500	---	
31	---	---	44900	45000	---	53400	---		---	50800	---	
MEAN	53900	63300	53500	58400	56700	52500	50100		55500	46700	59300	

WTR YR 1984 MEAN 53700 MAX 77800 MIN 17900

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	13.5	---	---	2.5	.0	.0	.0	.0	.0	1.0	.0
2	16.5	14.0	---	---	4.5	.0	.0	.0	.0	.0	3.0	.0
3	15.5	9.0	---	---	2.0	.0	.0	.0	.0	.0	1.5	.5
4	19.0	5.5	---	---	5.0	.0	.0	.0	.0	.0	.5	.0
5	19.5	6.0	---	---	.0	.0	.0	.0	.0	.0	.0	.0
6	20.5	8.0	---	---	.0	.0	1.0	.0	.0	.0	.0	.0
7	17.0	7.0	---	---	.0	.0	.0	.0	.0	.0	.0	.0
8	17.0	7.0	---	---	.0	.0	.0	.0	.0	.0	.0	.0
9	21.5	9.5	---	---	.5	.0	.0	.0	.0	.0	1.0	.0
10	20.5	9.0	---	---	1.5	.0	.0	.0	.0	.0	1.5	1.0
11	17.0	4.0	---	---	.5	.0	.0	.0	.0	.0	3.5	.0
12	17.0	4.0	---	---	1.5	.0	.0	.0	.0	.0	3.5	.0
13	16.5	4.5	---	---	1.0	.0	.0	.0	.0	.0	4.5	1.0
14	16.0	7.5	---	---	.5	.0	.0	.0	.5	.0	5.5	3.0
15	16.0	5.5	---	---	1.5	.0	.0	.0	.5	.0	6.0	2.5
16	16.5	2.5	---	---	.0	.0	.0	.0	1.0	.0	5.5	3.5
17	14.0	3.5	---	---	1.0	.0	.0	.0	1.5	.0	4.0	1.5
18	16.5	7.0	---	---	1.0	.0	.0	.0	1.0	.0	4.0	2.5
19	15.0	5.0	---	---	1.0	.0	.0	.0	.5	.0	5.0	.5
20	15.0	2.5	---	---	.5	.0	.0	.0	.0	.0	6.0	1.0
21	15.5	2.0	---	---	.0	.0	.0	.0	.0	.0	6.0	1.5
22	15.5	1.0	---	---	.0	.0	.0	.0	.5	.0	5.0	2.5
23	15.5	1.5	---	---	1.0	.0	.0	.0	.0	.0	6.5	2.5
24	14.5	4.0	---	---	1.5	.0	.0	.0	.0	.0	6.0	1.5
25	15.5	2.0	---	---	1.0	.0	.0	.0	.0	.0	5.5	3.0
26	15.0	1.5	---	---	2.5	.0	.0	.0	.0	.0	4.5	2.5
27	15.0	1.5	---	---	3.5	.0	.0	.0	.0	.0	3.5	2.0
28	15.0	.5	---	---	.0	.0	.0	.0	1.0	.0	5.0	1.0
29	15.0	2.0	---	---	.0	.0	.0	.0	2.0	.0	5.0	2.0
30	---	---	5.5	.0	.0	.0	.0	.0	---	---	4.5	4.0
31	---	---	---	---	.0	.0	.0	.0	---	---	5.5	4.0
MONTH	21.5	.5	5.5	.0	5.0	.0	1.0	.0	2.0	.0	6.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.0	3.0	7.5	5.0	16.0	15.0	29.5	11.5	---	---		
2	4.5	1.5	10.0	6.5	15.5	12.5	30.0	10.0	30.5	12.5		
3	5.5	1.5	10.0	5.5	16.0	12.0	---	---	27.5	14.0		
4	6.0	.5	10.5	7.5	15.0	12.5	---	---	---	---		
5	6.5	1.5	11.5	7.0	14.5	13.0	---	---	---	---		
6	6.0	3.0	10.5	7.5	13.5	12.0	---	---	---	---		
7	8.0	4.5	10.0	6.5	13.5	10.5	---	---	---	---		
8	8.5	3.0	22.0	7.5	12.5	10.5	---	---	---	---		
9	7.0	3.5	11.5	6.0	14.0	8.5	---	---	---	---		
10	7.5	2.5	13.0	7.0	14.0	9.5	---	---	---	---		
11	7.0	4.5	15.5	9.5	24.5	11.0	---	---	---	---		
12	18.5	2.0	16.0	10.0	26.0	10.0	---	---	---	---		
13	18.0	1.0	15.0	11.0	24.0	9.0	---	---	---	---		
14	19.0	.0	14.5	10.0	26.0	9.0	22.5	16.5	---	---		
15	20.0	.0	14.5	12.5	23.0	12.0	---	---	---	---		
16	21.0	.0	15.0	11.5	27.0	11.5	---	---	---	---		
17	9.5	4.0	14.5	9.0	27.0	9.0	22.5	15.0	---	---		
18	11.0	7.5	15.5	12.0	23.5	9.0	23.5	15.5	---	---		
19	9.5	7.5	16.0	7.0	26.5	10.0	22.0	15.5	---	---		
20	8.5	6.5	17.0	10.0	25.5	12.0	23.5	16.5	---	---		
21	8.0	5.5	17.0	12.5	25.5	7.0	23.0	15.0	---	---		
22	8.5	5.0	18.0	12.0	29.0	7.5	---	---	---	---		
23	9.5	4.0	17.0	9.5	30.0	7.5	21.0	17.0	---	---		
24	10.5	6.0	18.0	13.0	25.0	8.0	20.0	15.5	---	---		
25	9.0	6.0	18.0	13.5	24.0	14.0	21.5	16.5	---	---		
26	5.5	4.0	18.5	12.5	29.5	14.0	25.0	15.5	---	---		
27	5.0	3.5	18.5	13.0	28.5	11.5	---	---	---	---		
28	4.0	1.5	18.0	12.0	30.0	11.5	---	---	---	---		
29	6.0	2.0	19.0	11.5	29.0	12.0	---	---	---	---		
30	6.5	4.5	17.0	12.5	22.5	12.5	---	---	---	---		
31	---	---	17.0	15.0	---	---	30.0	13.5	---	---		
MONTH	21.0	.0	22.0	5.0	30.0	7.0	30.0	10.0	30.5	12.5		
YEAR	30.5	.0										

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi downstream from Mandall Creek, 0.8 mi upstream from Dome Creek, and 14 mi west of Toponas.

DRAINAGE AREA.--23 mi^2, approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to current year. Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft, from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft upstream at different datum.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft, 3.5 mi upstream and Yampa Reservoir, capacity, 620 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years (water years 1953-65), 40.3 ft^3/s; 29,200 acre-ft/yr, prior to filling of Stillwater Reservoir; 18 years (water years 1968-84), 40.9 ft^3/s, 29,630 acre-ft/yr, subsequent to filling of Stillwater Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft^3/s, July 2, 1957, gage height, 6.39 ft, site and datum then in use; minimum daily, 1.6 ft^3/s, Oct. 6-24, Nov. 18 to Dec. 8, 1966, during filling of Stillwater Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 237 ft^3/s at 2300 June 27, gage height, 2.75 ft; minimum daily, 16 ft^3/s, Mar. 19 to 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	23	21	18	20	18	17	17	178	217	94	44
2	27	23	22	18	20	17	17	17	169	208	89	35
3	27	23	21	18	20	17	17	17	171	198	86	33
4	28	22	22	22	20	17	17	17	160	188	85	32
5	29	22	22	18	20	18	18	17	152	188	85	32
6	28	22	22	18	20	18	19	20	151	160	85	31
7	28	22	22	18	20	18	19	24	154	141	80	30
8	27	23	21	18	20	17	19	33	160	132	78	30
9	27	22	21	18	20	17	19	42	165	140	67	29
10	26	22	20	18	20	17	19	48	170	136	57	29
11	26	22	20	18	20	17	18	57	175	129	56	29
12	27	22	21	18	20	17	18	64	180	128	55	30
13	27	23	21	18	19	17	19	70	185	137	54	34
14	26	24	21	18	19	17	20	70	185	130	57	39
15	27	23	21	18	19	17	21	57	189	126	53	40
16	27	22	21	17	19	18	19	65	189	123	47	43
17	27	21	21	17	19	18	19	74	184	120	43	40
18	26	22	19	17	19	18	18	88	181	124	47	39
19	27	21	19	17	19	16	17	95	182	128	45	39
20	26	22	19	18	19	16	18	111	186	130	52	39
21	25	23	19	18	19	16	18	128	190	128	50	40
22	25	23	19	19	18	16	19	103	212	126	48	39
23	24	22	19	19	19	16	18	108	223	134	47	38
24	24	22	20	19	19	16	17	116	225	126	50	40
25	24	22	21	19	18	16	17	116	225	99	48	40
26	24	22	20	20	17	16	17	124	222	89	46	44
27	24	22	20	20	18	16	17	132	228	87	51	47
28	24	21	20	20	18	16	17	178	228	87	47	47
29	24	21	20	20	17	17	18	177	226	86	35	44
30	23	21	19	20	---	17	18	173	230	97	34	48
31	23	---	19	20	---	17	---	173	---	103	35	---
TOTAL	805	665	633	574	555	524	544	2531	5675	4145	1806	1124
MEAN	26.0	22.2	20.4	18.5	19.1	16.9	18.1	81.6	189	134	58.3	37.5
MAX	29	24	22	22	20	18	21	178	230	217	94	48
MIN	23	21	19	17	17	16	17	17	151	86	34	29

CAL YR 1983 TOTAL 17776 MEAN 48.7 MAX 305 MIN 16
WTR YR 1984 TOTAL 19581 MEAN 53.5 MAX 230 MIN 16

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°24'29", long 106°47'11", in SW¼NW¼ sec.11, T.5 N., R.84 W., Routt County, Hydrologic Unit 14050001, on left bank, 0.4 mi upstream from Beaver Creek, 0.6 mi downstream from Storm King Creek, 4.5 mi upstream from mouth, and 6.0 mi southeast of Steamboat Springs.

DRAINAGE AREA.--42.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to September 1922, monthly discharge only, published in WSP 1313. October 1965 to September 1973, flow of Highline Canal included. Annual maximum discharge, water years 1978-81. May 1982 to current year.

REVISED RECORDS.--WDR-CO-82-3: 1978-81 (M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,050 ft, from topographic map. Prior to Oct. 1, 1965, water-stage recorder at site 0.2 mi downstream at different datum. Supplementary water-stage recorder on Highline Canal, May 18, 1966 to Sept. 30, 1973. Operated as a crest-stage partial-record site, June 1978 to May 1982, at present site and datum.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station by Highline Canal from Beaver and Storm King Creeks for irrigation below station. No other diversion above station.

AVERAGE DISCHARGE.--12 years (water years 1921-22, 1966-73, 1984), 88.3 ft^3/s; 64,000 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,800 ft^3/s, June 15, 1921; minimum daily, 4.5 ft^3/s Oct. 29, Nov. 7, 8, 1921, Aug. 28, 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	0430	1,070	2.53	June 15	0000	1,520	2.82
June 1	2000	1,240	2.65	June 21	1930	* 1,590	2.85

Minimum daily discharge, 8.7 ft^3/s, Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	14	12	9.4	8.7	11	39	1120	758	87	47
2	14	16	14	11	9.4	8.8	11	46	1080	748	58	26
3	17	15	14	11	9.4	9.0	11	52	1060	660	45	16
4	15	14	14	11	9.4	9.2	12	58	1010	640	37	13
5	24	13	13	11	9.4	9.6	12	70	809	560	33	12
6	23	13	13	11	9.4	9.8	12	76	606	500	43	11
7	18	12	13	11	9.4	10	13	72	587	430	52	18
8	14	16	13	11	9.4	10	15	70	432	360	32	29
9	12	12	13	11	9.4	10	17	80	373	310	30	17
10	17	18	13	11	9.4	10	16	100	347	500	31	12
11	25	16	13	11	9.4	11	20	150	455	300	25	12
12	18	15	13	10	9.4	11	18	180	549	230	23	37
13	24	15	13	10	9.4	11	17	210	775	200	21	42
14	25	14	13	10	9.4	11	17	250	1130	200	19	21
15	23	16	13	10	9.4	11	18	347	1270	180	19	15
16	17	15	13	10	9.2	11	20	373	1130	150	19	37
17	20	14	13	9.8	9.2	11	25	402	1140	130	18	53
18	28	15	13	9.8	9.2	11	35	387	1060	110	17	22
19	26	15	13	9.8	9.2	11	45	410	1030	98	26	16
20	20	14	13	9.8	9.2	11	48	514	1120	87	78	18
21	20	15	12	9.8	9.0	11	40	559	1220	79	42	30
22	21	15	12	9.6	9.0	11	41	606	1150	77	25	28
23	22	14	12	9.6	9.0	11	47	719	1100	87	23	18
24	19	14	12	9.6	9.0	11	60	880	1070	129	42	15
25	14	14	12	9.6	9.0	11	80	942	931	87	31	27
26	14	14	12	9.6	8.8	11	70	645	895	92	29	36
27	15	13	12	9.4	8.8	11	66	677	871	87	19	28
28	14	14	12	9.4	8.8	11	45	666	836	114	15	18
29	12	14	12	9.4	8.8	11	43	729	837	75	14	15
30	12	14	12	9.4	---	11	40	867	792	67	12	14
31	15	---	12	9.4	---	11	---	880	---	75	12	---
TOTAL	568	438	396	316.0	267.2	326.1	925	12056	26785	8120	977	703
MEAN	18.3	14.6	12.8	10.2	9.21	10.5	30.8	389	893	262	31.5	23.4
MAX	28	19	14	12	9.4	11	80	942	1270	758	87	53
MIN	10	12	12	9.4	8.8	8.7	11	39	347	67	12	11
AC-FT	1130	869	785	627	530	647	1830	23910	53130	16110	1940	1390

CAL YR 1983 TOTAL 44866.1 MEAN 123 MAX 1450 MIN 5.0 AC-FT 88990
WTR YR 1984 TOTAL 51877.3 MEAN 142 MAX 1270 MIN 8.7 AC-FT 102900

NOTE.--NO GAGE-HEIGHT RECORD DEC. 6 TO MAY 14.

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 24...	1110	18	39	7.4	3.0	10.3	--	16	4.7	.94
MAY 14...	1220	236	33	7.9	4.0	10.0	.49	14	4.1	.79
JUN 13...	0815	585	21	7.5	3.0	10.4	--	8	2.5	.50
SEP 28...	1515	18	39	7.6	7.5	9.4	--	17	5.2	1.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT 24...	1.9	.2	.70	15	6.6	.90	<.10	10	35	.05
MAY 14...	1.2	.1	.90	11	7.3	.60	<.10	6.9	29	.04
JUN 13...	1.0	.2	.40	8.0	5.1	.40	<.10	6.6	21	.03
SEP 28...	1.8	.2	.70	17	5.5	.80	<.10	9.6	35	.05

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
OCT 24...	1.7	<.020	<.10	.050	.45	.50	.010	<.010	<10	35
MAY 14...	18	<.010	.19	.030	.27	.30	.010	.020	<10	29
JUN 13...	34	<.010	<.10	<.010	--	<.20	.010	.010	<10	23
SEP 28...	1.7	<.010	<.10	<.010	--	<.20	.010	<.010	<10	36

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
JUN 13...	<1	18	<1	<10	2	81	<1
SEP 28...	<1	18	<1	<10	<1	180	2

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 13...	1	<.1	<1	5	<1	<1	5
SEP 28...	2	.3	<1	3	<1	<1	9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 24...	1110	18	28	1.4
JUN 13...	0815	585	2	3.2

09238900 FISH CREEK AT UPPER STATION, NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°28'30", long 106°47'11", in SE¼SE¼ sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--24.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1972, May 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,150 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station by Mount Werner Recreation area and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoir.

AVERAGE DISCHARGE.--6 years (water years 1967-72), 69.6 ft^3/s; 50,430 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,110 ft^3/s, June 20, 1968, gage height, 3.14 ft; minimum daily, 0.01 ft^3/s, Aug. 7, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 958 ft^3/s at 2000 June 29, gage height, 2.85 ft; minimum daily, 2.7 ft^3/s, Mar. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	13	15	10	5.2	4.8	6.1	19	729	617	44	13
2	6.0	12	16	10	5.7	4.8	6.5	20	603	623	36	8.1
3	7.8	12	16	8.9	5.4	4.7	6.6	19	561	558	26	5.6
4	9.4	13	16	8.8	5.5	4.7	7.0	19	526	515	20	6.9
5	13	13	15	8.7	5.5	4.7	7.9	20	498	465	19	6.2
6	16	11	9.4	8.4	5.6	4.7	9.3	20	440	410	25	5.8
7	17	12	10	8.2	5.6	5.1	9.4	21	422	385	19	9.3
8	13	16	11	8.0	5.5	2.7	11	22	330	383	14	11
9	8.7	13	11	7.8	5.6	5.1	13	42	270	382	14	7.0
10	12	14	11	7.6	5.2	4.9	11	75	250	492	9.8	6.7
11	16	15	11	7.6	5.2	4.8	12	119	320	275	8.7	6.6
12	13	16	11	7.5	5.2	4.8	11	175	380	215	6.3	15
13	11	17	11	7.4	5.4	4.4	11	228	503	198	6.9	14
14	16	16	11	6.9	5.4	4.5	11	410	607	194	4.8	9.2
15	17	19	11	7.0	5.4	4.6	12	392	718	162	5.8	5.9
16	13	15	11	6.8	5.4	4.7	17	362	667	138	5.0	18
17	12	15	11	6.6	5.4	4.7	26	344	638	122	5.4	22
18	14	15	11	6.4	5.5	4.7	36	326	657	106	12	12
19	14	15	11	6.2	5.3	4.8	36	320	607	91	31	9.7
20	12	15	11	6.2	5.0	5.0	30	392	605	80	28	9.6
21	12	16	11	6.0	4.9	5.2	26	458	688	70	17	15
22	14	15	11	5.8	4.9	5.3	24	440	714	65	17	17
23	13	15	11	5.6	4.8	5.4	27	464	699	64	22	9.4
24	13	15	11	5.4	4.7	5.6	30	575	718	82	17	8.3
25	11	16	11	5.4	4.6	5.7	28	617	654	65	19	13
26	11	16	10	5.2	4.7	5.8	25	491	624	57	13	16
27	12	19	10	5.2	4.7	5.8	23	477	651	49	6.6	15
28	12	15	10	5.0	4.7	5.8	23	464	664	47	7.5	11
29	11	16	10	5.0	4.7	5.9	21	470	697	38	7.5	11
30	11	16	10	5.0	---	5.8	20	512	675	52	7.2	9.8
31	13	---	9.8	5.0	---	6.0	---	554	---	41	16	---
TOTAL	376.7	446	355.2	213.6	150.7	155.5	536.8	8867	17115	7041	490.5	327.1
MEAN	12.2	14.9	11.5	6.89	5.20	5.02	17.9	286	571	227	15.8	10.9
MAX	17	19	16	10	5.7	6.0	36	617	729	623	44	22
MIN	2.8	11	9.4	5.0	4.6	2.7	6.1	19	250	38	4.8	5.6
AC-FT	747	885	705	424	299	308	1060	17590	33950	13970	973	649
a	89	84	84	89	82	91	77	97	117	195	160	98

CAL YR 1983	TOTAL	27838.63	MEAN	76.3	MAX	763	MIN	.38	AC-FT	55220
WTR YR 1984	TOTAL	36075.1	MEAN	98.6	MAX	729	MIN	2.7	AC-FT	71550

a - DIVERSIONS, IN ACRE-FEET, BY MOUNT WERNER WATER & SANITATION DISTRICT AND CITY OF STEAMBOAT SPRINGS.

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
24...	1345	9.3	30	7.6	3.0	10.4	--	11	3.5	.64
MAY										
14...	1400	274	34	7.4	4.0	10.2	.55	14	4.4	.73
JUN										
13...	1055	354	19	7.4	4.0	10.2	--	7	2.3	.40
SEP										
06...	1330	5.7	30	8.1	12.0	8.0	--	12	3.5	.70

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT										
24...	1.3	.2	.70	12	4.5	.60	<.10	6.2	25	.03
MAY										
14...	1.0	.1	1.0	11	5.8	.40	<.10	5.8	26	.04
JUN										
13...	.80	.1	.40	6.0	4.4	<.20	<.10	5.0	--	--
SEP										
06...	1.2	.2	.80	11	3.9	.30	<.10	5.7	23	.03

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
OCT										
24...	.62	<.020	<.10	.030	.47	.50	.010	<.010	<10	20
MAY										
14...	19	<.010	.15	.030	.37	.40	.010	.020	<10	20
JUN										
13...	--	<.010	<.10	<.010	--	<.20	.010	.010	<10	15
SEP										
06...	.35	<.010	<.10	.030	.27	.30	<.010	.030	<10	22

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
JUN 13...	<1	12	<1	<10	2	65	6
SEP 06...	<1	14	<1	<10	<1	94	<1

DATE	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 13...	3	<.1	<1	3	<1	<1	8
SEP 06...	4	<.1	<1	<1	<1	<1	<3

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
DEC 14...	1500	10	50	.0
JAN 25...	1300	2.2	50	.5
MAR 15...	1300	1.9	50	2.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 24...	1345	9.3	6	.15
JUN 13...	1055	354	1	.96
SEP 06...	1330	5.7	41	.63

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

DRAINAGE AREA.--604 mi^2.

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft, National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi upstream at datum 4.16 ft, higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft upstream at datum 0.44 ft, higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft, higher.

REMARKS.--Records good. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres above station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--77 years, 472 ft^3/s; 342,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft^3/s, June 14, 1921, gage height, 7.08 ft, present datum, from rating curve extended above 4,800 ft^3/s; maximum gage height, 7.12 ft, June 25, 1984; minimum daily, 4.0 ft^3/s, Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	2000	5,370	6.92	June 01	2300	5,300	6.87
May 25	1700	*5,670	7.12	June 16	0100	4,370	6.21

Minimum daily discharge, 108 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	142	164	150	122	121	198	761	4890	2230	651	331
2	113	142	164	145	120	123	198	887	4840	2070	633	392
3	137	138	162	145	120	126	195	974	4300	1930	538	341
4	143	136	162	145	122	124	198	1150	4110	1760	462	275
5	160	132	164	140	124	125	202	1370	3870	1620	447	217
6	170	130	166	140	124	123	223	1450	3590	1500	472	192
7	161	128	166	140	122	126	237	1370	3900	1400	508	189
8	152	162	164	140	124	126	273	1320	3690	1310	447	199
9	149	151	160	135	120	129	323	1580	3490	1280	402	190
10	162	145	160	135	122	131	314	2450	2940	1820	382	177
11	184	149	158	130	120	134	375	3120	2830	1160	348	170
12	182	160	158	130	120	134	345	3520	2970	928	325	187
13	177	165	156	130	121	137	336	4040	3140	860	312	227
14	186	167	160	128	121	140	327	4570	3660	904	317	198
15	185	156	158	124	117	140	345	5100	4120	836	308	180
16	167	165	158	125	121	145	400	5130	4010	729	300	195
17	158	192	169	123	121	143	506	4820	3820	652	288	260
18	162	222	165	125	121	144	710	4490	3700	576	284	217
19	172	226	163	125	119	145	873	3780	3420	530	292	186
20	165	230	156	125	123	149	915	3810	3340	487	449	185
21	156	244	172	125	121	156	761	4180	3480	488	499	199
22	154	233	163	125	119	157	768	4300	3390	500	394	205
23	149	247	165	125	119	155	894	4260	3190	492	354	189
24	149	237	160	125	121	160	1290	4720	3010	672	375	174
25	140	237	160	125	121	159	1510	5550	2810	662	375	183
26	144	150	160	123	119	165	1230	4930	2610	656	375	212
27	135	166	160	121	119	159	958	4360	2530	596	335	216
28	133	244	155	121	128	157	859	4010	2410	615	278	198
29	131	241	155	118	120	159	796	3810	2370	567	272	186
30	127	234	150	120	---	165	775	3980	2300	567	283	188
31	134	---	150	120	---	202	---	4050	---	591	285	---
TOTAL	4745	5471	4983	4028	3511	4459	17334	103842	102730	30988	11990	6458
MEAN	153	182	161	130	121	144	578	3350	3424	1000	387	215
MAX	186	247	172	150	128	202	1510	5550	4890	2230	651	392
MIN	108	128	150	118	117	121	195	761	2300	487	272	170
AC-FT	9410	10850	9880	7990	6960	8840	34380	206000	203800	61460	23780	12810

CAL YR 1983	TOTAL	247431	MEAN	678	MAX	5040	MIN	105	AC-FT	490800
WTR YR 1984	TOTAL	300539	MEAN	821	MAX	5550	MIN	108	AC-FT	596100

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on State Highway 129, 0.8 mi north of Clark, and 2.0 mi upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi^2.

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft, (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft upstream at datum 0.15 ft lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft lower.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 230 acres above and about 460 acres below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft since 1963 and Steamboat Lake, capacity, 23,060 acre-ft since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--66 years, 338 ft^3/s; 244,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,910 ft^3/s, May 23, 1984, gage height, 6.12 ft; minimum daily determined, 22 ft^3/s, Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 17	2100	4,020	5.64	June 21	2200	2,660	4.64
May 23	2200	*4,910	6.12	July 10	0600	2,900	4.82

Minimum daily discharge, 53 ft^3/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	145	108	72	56	60	66	138	2840	2100	367	155
2	145	143	105	72	54	60	72	145	2300	2000	351	128
3	160	139	102	70	54	60	65	150	2360	1890	311	114
4	153	135	100	70	54	62	63	162	2450	1800	274	106
5	170	132	97	68	54	64	68	186	2410	1740	247	102
6	175	132	95	68	54	66	73	202	2190	1680	246	96
7	172	130	94	66	54	68	77	208	2140	1610	237	115
8	170	167	94	66	54	68	77	201	1880	1640	216	125
9	170	148	94	66	54	68	84	358	1730	2020	208	118
10	219	132	92	66	53	68	80	494	1510	2080	200	101
11	209	143	90	65	54	70	80	818	1610	1280	190	118
12	186	143	90	64	54	70	78	1230	1900	1100	182	229
13	170	141	88	64	54	70	77	1740	1730	1020	175	257
14	180	124	86	63	55	70	74	2210	2080	988	170	160
15	172	126	86	62	56	70	82	2540	2180	884	165	136
16	160	130	84	62	56	70	93	3230	2080	797	163	190
17	143	132	84	62	56	70	122	3160	2000	734	160	178
18	172	141	84	62	56	70	157	2990	1960	650	160	142
19	189	132	82	60	57	70	183	2430	2020	620	156	131
20	160	124	82	60	57	70	184	3140	2050	602	230	135
21	157	126	80	60	58	70	182	3660	2170	584	200	177
22	153	137	80	60	58	68	160	3520	2250	548	166	194
23	155	130	78	58	58	62	150	3620	2140	500	155	150
24	155	130	78	58	58	65	159	4090	2050	476	150	138
25	135	125	78	58	58	71	162	3690	2000	450	150	160
26	143	122	78	58	60	65	152	2780	1960	445	152	162
27	145	120	78	56	60	65	142	2990	2010	409	136	160
28	141	115	78	56	60	61	136	2690	2030	404	129	146
29	141	112	76	56	60	62	141	2600	2070	365	127	128
30	137	110	76	56	---	68	135	2670	2130	373	117	130
31	141	---	76	56	---	66	---	2640	---	387	112	---
TOTAL	5002	3966	2693	1940	1626	2067	3374	60682	62230	32176	6002	4381
MEAN	161	132	86.9	62.6	56.1	66.7	112	1957	2074	1038	194	146
MAX	219	167	108	72	60	71	184	4090	2840	2100	367	257
MIN	124	110	76	56	53	60	63	138	1510	365	112	96
AC-FT	9920	7870	5340	3850	3230	4100	6690	120400	123400	63820	11900	8690

CAL YR 1983 TOTAL 162499 MEAN 445 MAX 3040 MIN 62 AC-FT 322300
WTR YR 1984 TOTAL 186139 MEAN 509 MAX 4090 MIN 53 AC-FT 369200

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 1450001, on left bank 1.1 mi above mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, April 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,720 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--8 years (water years 1976-81, 83-84), 4.43 ft^3/s; 3,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329 ft^3/s, May 14, 1984, gage height, 4.08 ft, from rating curve extended above 77 ft^3/s; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 25	0545	51	2.66	June 7	0930	49	2.58
May 14	0230	*329	4.08	June 30	0430	26	2.24

Minimum daily discharge, 0.13 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.62	.92	.88	.80	.74	.96	19	28	13	3.5	1.7
2	.48	.55	1.3	.88	.80	.74	1.2	31	25	11	3.6	2.4
3	.88	.52	.91	.88	.78	.74	1.1	26	23	9.2	3.3	2.0
4	.88	.52	1.2	.86	.78	.74	1.4	18	22	8.4	3.1	1.6
5	.66	.54	1.1	.86	.78	.74	2.1	22	21	7.9	3.0	1.3
6	.56	.54	1.4	.84	.78	.74	3.8	19	26	7.2	3.3	1.1
7	.53	.54	1.1	.84	.78	.74	7.1	21	41	6.9	3.5	.96
8	.60	1.3	1.0	.84	.78	.74	7.6	53	39	7.8	2.8	.96
9	.55	.82	1.0	.84	.78	.74	6.2	68	40	9.3	2.5	.87
10	.68	.83	.93	.84	.78	.74	8.5	88	41	6.7	2.2	.81
11	.91	.80	1.0	.84	.76	.74	8.8	139	42	6.1	2.1	.98
12	.79	.86	1.1	.84	.76	.74	6.6	188	40	7.0	2.1	1.6
13	.63	.90	1.1	.84	.76	.74	4.2	260	38	5.8	2.2	1.4
14	.69	.81	1.1	.84	.76	.76	3.5	297	34	4.9	2.4	1.2
15	.75	.87	1.1	.84	.76	.78	4.4	295	32	4.3	2.3	.92
16	.64	1.2	1.1	.84	.76	.78	7.9	267	30	4.0	2.4	1.1
17	.62	1.0	1.1	.84	.76	.80	16	221	28	4.4	2.5	.98
18	.61	.90	1.1	.82	.76	.82	34	180	28	4.7	2.4	.87
19	.73	.73	1.1	.82	.76	.84	41	144	27	4.5	2.4	.92
20	.65	.86	1.0	.82	.76	.90	38	123	24	4.2	4.0	1.1
21	.58	1.1	1.0	.82	.74	1.0	30	111	21	3.8	3.0	1.1
22	.56	1.3	1.0	.82	.74	1.2	27	95	19	3.5	2.6	1.0
23	.55	1.1	1.0	.82	.74	1.3	32	74	17	4.5	2.3	.92
24	.56	.76	.98	.82	.74	1.3	45	55	15	5.2	2.0	.87
25	.54	1.0	.96	.80	.74	1.4	50	51	16	4.5	1.8	1.2
26	.53	1.7	.96	.80	.74	1.4	43	43	13	4.2	1.7	1.1
27	.55	1.0	.94	.80	.74	1.5	34	38	12	4.2	1.6	.96
28	.57	.91	.94	.80	.74	1.5	29	32	11	4.2	1.6	.88
29	.52	1.5	.92	.80	.74	1.4	23	25	11	3.7	1.5	.89
30	.50	1.0	.90	.80	---	1.2	21	22	20	3.7	1.4	.90
31	.56	---	.90	.80	---	.97	---	20	---	3.7	31	---
TOTAL	18.99	27.08	32.16	25.78	22.10	29.47	538.36	3045	784	182.5	106.1	34.59
MEAN	.61	.90	1.04	.83	.76	.95	17.9	98.2	26.1	5.89	3.42	1.15
MAX	.91	1.7	1.4	.88	.80	1.5	50	297	42	13	31	2.4
MIN	.13	.52	.90	.80	.74	.74	.96	18	11	3.5	1.4	.81
AC-FT	38	54	64	51	44	58	1070	6040	1560	362	210	69

CAL YR 1983 TOTAL 1501.65 MEAN 4.11 MAX 31 MIN .02 AC-FT 2980
WTR YR 1984 TOTAL 4846.13 MEAN 13.2 MAX 297 MIN .13 AC-FT 9610

NOTE.--NO GAGE-HEIGHT RECORD JAN. 2 TO MAR. 27 AND JULY 17 TO SEPT. 7.

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURES: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos May 29, 1981; minimum, 117 micromhos Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
04...	1515	.89	755	8.4	13.0	9.4	--	360	87	35	36
NOV											
02...	1040	.58	715	8.3	4.5	11.1	--	350	81	35	36
FEB											
27...	1230	.76	730	8.4	.0	12.3	.55	360	85	35	38
APR											
10...	1130	6.6	598	8.5	3.0	10.6	1.4	270	62	27	25
24...	1140	45	415	8.0	3.0	10.1	--	190	44	19	15
JUN											
12...	1010	43	487	8.5	9.5	9.3	--	250	57	25	12
JUL											
18...	1400	4.8	647	8.7	22.5	8.4	--	310	70	33	24
SEP											
07...	1330	1.0	750	8.6	13.0	11.0	--	350	79	36	33

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	.9	4.8	290	140	6.3	.20	8.8	490	.67	1.2
NOV										
02...	.9	5.9	301	130	4.6	.20	7.7	480	.65	.75
FEB										
27...	.9	2.6	286	150	4.5	.20	10	500	.68	1.0
APR										
10...	.7	2.9	199	130	4.2	.20	8.3	380	.52	6.8
24...	.5	2.8	127	90	3.2	.20	8.5	260	.35	32
JUN										
12...	.3	2.2	174	87	3.2	.20	9.6	300	.41	35
JUL										
18...	.6	3.0	209	140	4.5	.20	9.7	410	.56	5.3
SEP										
07...	.8	3.3	237	160	5.3	.20	5.0	460	.63	1.3

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
OCT										
04...	--	<.020	<.10	.070	.63	.70	.020	.020	50	630
NOV										
02...	--	<.020	<.10	.340	.26	.60	.030	.010	40	650
FEB										
27...	--	<.010	.25	.080	.22	.30	.020	.020	40	650
APR										
10...	--	<.010	.83	.100	.50	.60	.020	.030	30	500
24...	--	<.010	<.10	.020	.38	.40	.010	.020	20	320
JUN										
12...	--	<.010	.40	.010	.99	1.0	.030	.030	30	370
JUL										
18...	.11	.010	.12	.040	.46	.50	.030	<.010	50	570
SEP										
07...	--	<.010	<.10	.040	.56	.60	.010	.040	60	640

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV				
02...	1040	.58	30	.05
02...	1515	.58	66	.10
APR				
10...	1130	6.6	311	5.5
24...	1140	45	1680	204
JUN				
12...	1010	43	946	110
JUL				
18...	1400	4.8	53	.69

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Altitude of gage is 6,730 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor.

AVERAGE DISCHARGE.--8 years (water years 1976-81, 83-84), 2.71 ft³/s; 1,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, Apr. 22, 1980, gage height, 5.18 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 89 ft³/s at 0800 Apr. 25, gage height, 5.13 ft; minimum daily, 0.15 ft³/s, Oct. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.23	.94	.74	.68	.63	8.2	39	14	9.2	2.0	1.9
2	.52	.31	.94	.74	.68	.63	7.5	65	12	6.3	2.0	2.5
3	.70	.28	.71	.74	.68	.63	5.8	59	9.8	5.2	1.9	2.2
4	.56	.31	1.0	.74	.68	.64	6.2	60	9.5	4.7	1.7	2.0
5	.37	.37	.71	.73	.67	.64	8.8	54	10	4.4	1.7	1.8
6	.31	.71	.82	.73	.67	.64	14	48	13	4.2	2.0	1.6
7	.28	.71	.71	.73	.67	.64	20	40	23	3.9	1.9	1.6
8	.28	.88	.71	.73	.66	.65	26	39	29	3.6	1.4	1.5
9	.31	1.1	.76	.73	.66	.65	24	42	29	4.0	1.3	1.5
10	.37	1.1	.82	.72	.66	.65	16	46	17	6.0	1.1	1.4
11	.48	1.1	.88	.72	.66	.65	18	49	13	4.7	1.1	1.5
12	.45	1.1	.94	.72	.65	.65	13	51	12	3.9	1.0	2.0
13	.41	1.2	.94	.72	.65	.66	11	51	10	4.2	1.2	2.1
14	.45	1.3	.88	.72	.65	.69	11	50	9.4	4.5	1.4	1.9
15	.48	1.2	.82	.71	.64	.74	14	47	8.9	3.9	1.2	1.7
16	.37	1.1	.82	.71	.64	.77	21	46	9.0	3.5	1.4	1.6
17	.37	1.1	.81	.71	.64	.81	34	41	9.0	3.3	1.4	1.8
18	.37	1.4	.80	.71	.64	.84	59	36	8.3	2.9	1.4	1.7
19	.37	1.5	.80	.71	.64	.87	60	31	7.8	2.6	1.4	1.6
20	.34	1.5	.79	.70	.64	.90	47	25	7.8	2.4	4.3	1.9
21	.31	1.4	.79	.70	.63	1.1	31	22	7.4	2.4	3.1	2.0
22	.23	1.4	.78	.70	.63	1.2	41	20	6.7	1.9	2.7	2.0
23	.23	1.4	.78	.70	.63	1.4	58	18	6.4	2.8	2.4	1.9
24	.19	1.4	.77	.70	.63	1.5	77	16	6.1	3.3	2.2	1.7
25	.17	1.2	.77	.70	.63	1.7	79	17	6.2	2.6	2.0	1.7
26	.17	.66	.76	.69	.63	2.8	54	14	6.3	2.6	1.9	1.8
27	.17	.66	.76	.69	.62	3.9	40	13	5.6	2.7	1.8	1.8
28	.15	.82	.75	.69	.63	5.0	35	12	5.1	2.2	1.7	1.6
29	.15	.76	.75	.69	.63	5.0	33	11	4.7	2.0	1.6	1.5
30	.15	.88	.74	.69	---	5.5	34	9.7	9.5	2.2	1.6	1.4
31	.21	---	.74	.69	---	7.0	---	9.6	---	2.0	1.5	---
TOTAL	10.34	29.08	24.99	22.10	18.82	50.08	906.5	1081.3	325.5	114.1	55.3	53.2
MEAN	.33	.97	.81	.71	.65	1.62	30.2	34.9	10.8	3.68	1.78	1.77
MAX	.70	1.5	1.0	.74	.68	7.0	79	65	29	9.2	4.3	2.5
MIN	.15	.23	.71	.69	.62	.63	5.8	9.6	4.7	1.9	1.0	1.4
AC-FT	21	58	50	44	37	99	1800	2140	646	226	110	106

CAL YR 1983 TOTAL 1098.98 MEAN 3.01 MAX 26 MIN .15 AC-FT 2180
WTR YR 1984 TOTAL 2691.31 MEAN 7.35 MAX 79 MIN .15 AC-FT 5340

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to September 1981, June 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURE: April 1976 to September 1981.
SUSPENDED SEDIMENT DISCHARGE: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981. Automatic pumping sampler April 1976 to September 1981.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,520 micromhos Aug. 10, 11, 1980; minimum, 255 micromhos July 1, 1980.
WATER TEMPERATURES: Maximum, 28.5°C July 22, 1980; minimum, 0.0°C several days during winter period each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,650 mg/L Apr. 2, 1981; no flow many days most years.
SEDIMENT LOADS: Maximum daily, 702 tons Apr. 23, 1980; no flow many days most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
04...	1240	.75	1940	8.4	10.0	10.4	4.6	1000	200	120	98
NOV											
02...	1110	.31	1280	8.1	5.0	10.9	2.9	630	130	73	75
FEB											
27...	1350	.62	1600	8.3	.0	13.1	3.8	800	170	90	98
APR											
10...	1220	14	993	8.4	7.5	10.2	4.9	450	96	52	49
24...	1235	73	1090	8.1	5.0	9.3	--	580	120	67	35
JUN											
12...	1140	12	1430	8.4	16.0	8.2	--	790	170	88	53
JUL											
18...	1515	3.1	1650	8.6	25.0	8.5	--	990	180	130	84
SEP											
06...	1000	1.6	2220	8.3	13.0	9.5	--	1200	220	150	110

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	1	7.7	326	880	12	.20	5.5	1500	2.1	3.1
NOV										
02...	1	3.6	289	440	14	.20	4.8	920	1.2	.77
FEB										
27...	2	3.5	377	590	31	.30	9.5	1200	1.7	2.0
APR										
10...	1	3.8	198	340	10	.20	7.3	680	.92	26
24...	.7	5.0	163	460	5.4	.20	7.6	800	1.1	158
JUN										
12...	.8	3.9	189	590	8.9	.20	5.4	1000	1.4	34
JUL										
18...	1	5.3	171	870	20	.20	.9	1400	1.9	12
SEP										
06...	1	6.0	228	1100	30	.20	2.0	1800	2.4	7.6

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
OCT										
04...	2.9	.030	2.9	.090	1.6	1.7	.010	.010	120	2500
NOV										
02...	--	<.020	1.0	.110	1.8	1.9	.030	<.010	70	1300
FEB										
27...	--	<.010	2.9	.400	.50	.90	.010	.020	80	--
APR										
10...	3.5	.020	3.5	.270	1.1	1.4	.060	.050	60	840
24...	--	<.010	<.10	.010	.59	.60	.040	.030	60	1400
JUN										
12...	4.9	.040	4.9	.050	.75	.80	.030	.030	80	2100
JUL										
18...	3.9	.030	3.9	.060	.74	.80	.010	<.010	130	2900
SEP										
06...	3.4	.030	3.4	.050	.85	.90	.010	.040	160	3500

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
04...	1240	.75	109	.22
NOV				
02...	1110	.31	88	.07
FEB				
27...	1350	.62	217	.36
APR				
10...	1220	14	197	7.4
24...	1235	73	534	105
JUN				
12...	1140	12	241	7.8
JUL				
18...	1515	3.1	35	.29
SEP				
06...	1000	1.6	101	.44

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft downstream from U.S. Highway 40, 0.1 mi upstream from Sage Creek, 0.5 mi downstream from diversion point of Gibraltar Canal, and 4.7 mi east of Hayden.

DRAINAGE AREA.--1,430 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1965 to current year. Prior to October 1972, records included flow in Gibraltar Canal. Water-quality data available, June 1975 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres above and 200 acres below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 1,108 ft³/s, 802,200 acre-ft/yr; does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, May 16, 1984, gage height, 11.45 ft, maximum gage height, 11.90 ft, Apr. 27, 1974; minimum daily discharge, 5.1 ft³/s, July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,100 ft³/s at 0900 May 16, gage height, 11.45 ft; minimum daily, 230 ft³/s, Feb. 29.

REVISIONS.--The maximum discharges for the water years 1974 and 1979 have been revised to 12,300 ft³/s, Apr. 27, 1974, gage height, 11.90 ft, and 9,920 ft³/s, May 29, 1979, gage height, 10.29 ft, superseding figures published in reports WRD CO-74-1 and WDR CO-79-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	345	380	300	260	240	340	1750	10300	6180	1160	439
2	250	305	380	300	260	240	350	2730	10200	5530	1170	518
3	307	295	380	300	260	240	370	2900	9280	5170	975	439
4	348	285	380	300	260	240	380	3480	9230	4630	842	370
5	339	281	370	290	260	240	393	3750	8810	4310	786	305
6	417	272	370	290	260	240	462	3570	8440	4030	802	272
7	365	267	370	290	260	250	552	2950	9560	3740	858	267
8	355	360	360	290	250	250	687	3020	8660	3620	735	310
9	340	390	360	290	250	250	871	4040	8180	4180	644	300
10	385	325	360	290	250	250	780	6070	6980	5490	602	263
11	489	340	350	290	250	250	928	8300	6980	3530	548	249
12	450	360	350	280	250	250	804	9670	6720	2970	518	417
13	412	365	340	280	250	260	776	11000	6740	2730	483	512
14	434	375	340	280	250	260	709	12100	7680	2740	472	406
15	489	310	340	280	250	260	809	12300	8740	2530	467	335
16	428	345	340	280	240	260	1070	12500	8720	2210	450	355
17	395	370	330	280	240	260	1570	11800	8080	2000	439	518
18	401	423	330	270	240	260	2720	11200	7760	1790	423	406
19	483	401	330	270	240	260	3360	9510	7460	1650	478	335
20	428	396	320	270	240	270	2940	9710	7400	1550	728	330
21	395	418	320	270	240	270	2140	10700	7520	1510	850	375
22	380	402	320	270	240	280	2010	10700	7820	1470	637	483
23	375	400	320	270	240	280	2520	10800	7400	1360	560	395
24	370	390	320	270	240	280	3770	11600	7080	1390	554	350
25	345	390	310	270	240	290	4280	12000	6820	1430	574	390
26	325	390	310	270	240	290	3120	10600	6290	1380	567	440
27	325	390	310	260	240	290	2230	9720	6250	1230	494	470
28	325	390	310	260	240	300	1890	9200	6200	1170	428	420
29	320	390	310	260	230	310	1760	8690	6090	1090	406	380
30	310	390	310	260	---	320	1700	9000	6230	1140	395	390
31	320	---	310	260	---	330	---	9480	---	1190	380	---
TOTAL	11542	10760	10530	8640	7170	8270	46291	254840	233620	84940	19425	11439
MEAN	372	359	340	279	247	267	1543	8221	7787	2740	627	381
MAX	489	423	380	300	260	330	4280	12500	10300	6180	1170	518
MIN	237	267	310	260	230	240	340	1750	5090	1090	380	249
AC-FT	22890	21340	20890	17140	14220	16400	91820	505500	463400	168500	38530	22690

CAL YR 1983 TOTAL 502027 MEAN 1375 MAX 9630 MIN 172 AC-FT 995800
WTR YR 1984 TOTAL 707467 MEAN 1933 MAX 12500 MIN 230 AC-FT 1403000

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi upstream from North Fork Elkhead Creek, 4.5 mi northwest of Elkhead, and 12 mi north of Hayden.

DRAINAGE AREA.--64.2 mi^2.

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,845 ft, from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years (water years 1954-84), 56.9 ft^3/s; 41,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,850 ft^3/s, May 20, 1984, gage height, 7.58 ft, from rating curve extended above 1,500 ft^3/s, on basis of slope area determination of peak flow; no flow Sept.1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 20	2200	*2,850	7.58	June 6	2200	1,080	6.20

Minimum daily discharge, 4.4 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	13	15	10	8.2	7.6	18	86	644	50	20	19
2	7.3	13	15	10	8.2	7.6	18	94	491	41	22	15
3	29	13	14	10	8.2	7.6	18	94	449	35	18	12
4	27	13	14	10	8.2	7.6	20	99	449	31	18	11
5	23	12	14	10	8.2	7.6	21	120	494	29	16	11
6	21	12	14	9.8	8.2	7.4	21	112	612	27	17	9.9
7	19	12	14	9.8	8.2	7.4	23	101	720	26	16	10
8	17	24	14	9.8	8.2	7.4	27	129	620	26	15	12
9	16	18	13	9.6	8.2	7.4	29	252	567	27	13	11
10	17	16	13	9.6	8.2	7.4	28	530	476	31	13	9.8
11	27	16	13	9.6	8.2	7.2	27	930	418	30	13	13
12	21	16	13	9.4	8.2	7.2	27	1310	381	27	13	30
13	17	16	13	9.4	8.2	7.2	26	1570	365	24	13	24
14	18	15	13	9.4	8.2	7.2	28	1700	358	24	14	16
15	24	19	12	9.2	8.2	7.2	34	1890	345	23	13	13
16	23	16	12	9.2	8.0	7.0	44	1820	329	22	13	14
17	21	17	12	9.2	8.0	7.0	60	1480	291	20	12	16
18	25	17	12	9.0	8.0	7.2	116	1200	250	19	12	13
19	42	17	12	9.0	8.0	7.2	200	1220	219	18	12	12
20	34	17	12	9.0	8.0	7.2	204	1560	190	17	20	12
21	26	17	12	8.8	7.8	7.2	170	1290	163	16	20	18
22	21	16	12	8.8	7.8	7.4	151	1110	139	16	15	27
23	19	16	12	8.8	7.8	7.6	148	1180	117	16	13	17
24	17	16	11	8.6	7.8	7.8	164	1160	98	18	13	16
25	17	16	11	8.6	7.8	8.0	176	897	87	19	15	20
26	16	16	11	8.6	7.8	8.2	143	732	82	21	14	20
27	15	15	11	8.6	7.8	8.6	118	715	70	20	12	18
28	14	15	11	8.4	7.8	9.0	99	632	60	19	12	16
29	14	15	11	8.4	7.6	10	92	580	53	17	11	15
30	13	15	11	8.4	---	12	82	572	49	16	11	14
31	13	---	11	8.4	---	14	---	551	---	19	10	---
TOTAL	617.7	469	388	285.4	233.0	246.4	2332	25716	9586	744	449	464.7
MEAN	19.9	15.6	12.5	9.21	8.03	7.95	77.7	830	320	24.0	14.5	15.5
MAX	42	24	15	10	8.2	14	204	1890	720	50	22	30
MIN	4.4	12	11	8.4	7.6	7.0	18	86	49	16	10	9.8
AC-FT	1230	930	770	566	462	489	4630	51010	19010	1480	891	922

CAL YR 1983 TOTAL 32953.6 MEAN 90.3 MAX 1490 MIN 3.5 AC-FT 65360
WTR YR 1984 TOTAL 41531.2 MEAN 113 MAX 1890 MIN 4.4 AC-FT 82380

09249750 WILLIAMS FORK RIVER AT MOUTH NEAR HAMILTON, CO.

LOCATION.--Lat 40°26'14", Long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, and 6.1 mi north-northeast of Hamilton, Co.

DRAINAGE AREA.--419 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1984.

GAGE.--Water stage recorder. Altitude of gage is 6,170 ft, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--For period February to September: maximum discharge 4,750 ft^3/s at 0900 May 16, gage height, 9.96 ft; minimum daily, 55 ft^3/s, Feb. 22, 23 and Mar. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					59	60	97	279	3040	990	368	130
2					60	62	96	396	2590	860	438	181
3					60	62	92	435	2240	815	298	135
4					60	62	92	501	2190	746	274	117
5					59	60	104	526	2060	690	250	107
6					58	55	126	526	1980	642	333	103
7					58	55	150	462	2820	602	271	99
8					57	60	151	477	2380	562	229	99
9					60	63	176	658	2050	606	208	97
10					59	66	154	1090	1730	790	193	93
11					60	66	167	1740	1780	610	175	93
12					60	65	141	2540	1760	498	167	130
13					59	65	151	3350	1630	470	167	132
14					59	70	139	3510	1810	526	170	121
15					59	78	150	3680	1890	445	178	103
16					59	75	183	3980	1870	407	199	105
17					59	75	247	3810	1740	368	178	130
18					57	72	409	3450	1620	337	170	109
19					58	80	502	2600	1460	312	199	99
20					59	85	473	2860	1450	292	292	97
21					59	90	320	3350	1420	283	337	103
22					55	102	271	3190	1330	271	238	117
23					55	104	287	3180	1280	292	202	109
24					60	98	400	3610	1220	396	193	103
25					60	105	512	3770	1160	410	211	111
26					60	98	401	2900	1100	351	193	121
27					65	99	317	2810	1070	354	162	113
28					65	90	284	2470	1020	312	147	109
29					59	98	284	2240	970	302	137	103
30					--	100	271	2350	955	340	130	107
31					--	96	---	2330	---	421	123	
TOTAL					1717	2416	7147	69070	51615	15300	6830	3376
MEAN					59.2	77.9	238	2228	1721	494	220	113
MAX					65	105	512	3980	3040	990	438	181
MIN					55	55	92	279	955	271	123	93
AC-FT					3410	4790	14180	137000	102400	30350	13550	6700

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050002, on right bank 2.2 mi southwest of Thornburgh and 3.0 mi upstream from Little Creek.

DRAINAGE AREA.--65 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1952 to current year. Water-quality data available, May to September 1982. Published as "near Thornburg" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of about 1,320 acres above station.

AVERAGE DISCHARGE.--32 years, 28.2 ft^3/s; 20,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,580 ft^3/s, May 14, 1984, gage height, 7.36 ft, from rating curve extended above 540 ft^3/s, on basis of slope-area determination of peak flow; minimum daily discharge, 0.20 ft^3/s, for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 18	2100	727	5.92	May 14	2400	*1,580	7.36
Apr. 24	2300	267	4.15	June 7	0300	1,070	6.47

Minimum daily discharge, 4.5 ft^3/s, Oct. 10, 31, Nov. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	5.1	10	7.6	6.6	7.0	15	94	466	77	22	5.7
2	6.6	5.2	10	7.6	6.6	7.0	16	177	345	74	19	6.1
3	9.2	4.9	9.8	7.4	6.6	7.2	15	146	320	69	14	5.9
4	8.0	4.8	9.8	7.4	6.6	7.2	15	155	317	64	13	5.5
5	7.2	4.6	9.6	7.2	6.6	7.2	19	157	344	58	11	5.5
6	6.1	4.6	9.4	7.2	6.6	7.4	35	155	423	54	15	5.4
7	5.7	4.5	9.4	7.2	6.6	7.4	64	124	725	48	13	5.2
8	5.4	10	9.2	7.2	6.6	7.6	97	137	520	42	10	5.2
9	5.2	9.1	9.2	7.0	6.6	7.8	123	219	387	48	9.0	5.1
10	6.0	7.2	9.0	7.0	6.6	8.0	62	366	303	94	8.5	4.9
11	7.4	8.2	8.8	7.0	6.6	8.2	76	551	279	64	8.5	5.3
12	6.2	8.3	8.6	7.0	6.6	8.4	52	717	253	53	8.1	18
13	5.4	7.8	8.6	7.0	6.6	8.6	35	870	230	52	8.1	12
14	8.8	8.4	8.6	7.0	6.6	10	39	885	228	54	8.1	8.9
15	8.8	8.2	8.6	7.0	6.6	12	66	1110	217	46	9.1	6.5
16	6.6	7.9	8.6	6.8	6.6	12	133	1030	205	41	10	5.8
17	6.1	8.1	8.6	6.8	6.6	12	218	807	188	37	8.5	5.8
18	6.1	7.9	8.6	6.8	6.6	13	423	664	170	35	9.4	5.8
19	6.3	7.4	8.4	6.8	6.6	13	373	535	153	33	9.6	5.8
20	6.1	6.6	8.4	6.8	6.6	13	226	575	145	31	16	5.6
21	5.5	7.6	8.2	6.8	6.6	13	119	654	138	29	19	5.6
22	5.5	9.7	8.2	6.8	6.6	13	97	544	129	28	10	5.9
23	5.2	10	8.0	6.8	6.6	15	135	579	118	28	8.9	6.1
24	5.1	10	8.0	6.8	6.8	19	191	672	110	37	9.0	6.0
25	5.3	9.7	8.0	6.8	6.8	19	221	595	107	55	10	6.1
26	5.2	10	7.8	6.6	6.8	19	144	471	104	43	9.6	6.1
27	5.2	10	7.8	6.6	6.8	16	104	455	98	40	8.7	6.1
28	5.1	10	7.8	6.6	6.8	14	90	395	92	34	7.8	6.1
29	4.8	10	7.8	6.6	6.8	15	82	368	87	31	6.9	6.1
30	4.5	10	7.8	6.6	---	14	85	380	81	27	6.1	5.9
31	4.5	---	7.6	6.6	---	14	---	372	---	26	5.5	---
TOTAL	187.8	235.8	268.2	215.4	192.6	355.0	3370	14959	7282	1452	331.4	194.0
MEAN	6.06	7.86	8.65	6.95	6.64	11.5	112	483	243	46.8	10.7	6.47
MAX	9.2	10	10	7.6	6.8	19	423	1110	725	94	22	18
MIN	4.5	4.5	7.6	6.6	6.6	7.0	15	94	81	26	5.5	4.9
AC-FT	373	468	532	427	382	704	6680	29670	14440	2880	657	385

CAL YR 1983 TOTAL 22386.1 MEAN 61.3 MAX 731 MIN 2.9 AC-FT 44400
WTR YR 1984 TOTAL 29043.2 MEAN 79.4 MAX 1110 MIN 4.5 AC-FT 57610

09250507 WILSON CREEK ABOVE TAYLOR CREEK, NEAR AXIAL, CO

LOCATION.--Lat 40°18'53", long 107°47'58", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on left bank about 200 ft upstream from Moffat County Road 17, about 50 ft upstream from confluence of Taylor Creek, and 2.4 mi north of Axial.

DRAINAGE AREA.--20.0 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,315 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352 ft³/s, May 14, 1984 gage height, 8.71 ft, on basis of indirect measurement of peak flow; minimum daily, 0.15 ft³/s, Mar. 20, 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 352 ft³/s at 2000 May 14, gage height, 8.71 ft, on basis of indirect measurement of peak flow; minimum daily, 1.4 ft³/s, Jan. 21 to 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.9	1.9	1.6	1.6	2.0	4.5	20	37	21	2.7	2.9
2	3.5	1.9	1.7	1.7	1.6	2.0	4.4	29	31	16	4.1	2.9
3	3.9	2.0	1.8	1.7	1.6	2.0	4.6	30	29	15	2.7	2.8
4	3.4	2.0	2.2	2.0	1.6	2.0	4.9	35	27	13	3.7	2.7
5	2.7	2.0	1.6	1.6	1.6	2.0	5.2	42	41	15	4.0	3.0
6	2.3	2.0	1.5	1.5	1.7	2.0	5.9	53	46	14	5.0	3.0
7	2.3	1.9	1.6	1.5	1.7	2.0	6.6	38	68	16	8.1	2.5
8	2.1	4.2	2.0	1.5	1.7	2.0	7.7	42	66	23	8.2	2.5
9	2.2	2.8	2.0	1.5	1.7	2.0	9.1	43	76	26	8.2	2.4
10	2.3	2.8	2.0	1.5	1.7	2.5	8.6	65	75	26	7.6	1.9
11	2.2	2.5	2.2	1.5	1.8	2.6	6.2	58	71	21	6.9	6.7
12	2.1	2.0	2.3	1.6	1.8	2.6	4.3	153	69	19	6.7	3.7
13	2.0	2.0	2.3	1.6	1.8	3.0	3.3	257	67	17	6.0	3.1
14	2.5	2.0	2.0	1.6	1.8	3.0	3.0	262	64	20	5.4	2.5
15	2.6	2.0	1.7	1.6	1.8	3.4	3.6	234	61	19	5.6	1.7
16	2.2	2.0	1.7	1.6	1.8	3.6	4.6	209	63	18	5.0	1.9
17	2.1	2.0	1.9	1.6	1.8	3.1	6.1	163	45	17	5.1	2.4
18	2.1	2.1	2.0	1.6	1.9	2.8	13	128	42	15	7.5	2.5
19	2.0	2.0	2.3	1.5	1.9	3.0	21	104	42	14	5.9	2.1
20	1.9	2.2	1.5	1.5	1.9	3.5	37	118	42	12	9.7	2.1
21	1.9	2.0	1.5	1.4	1.9	3.5	26	90	40	11	3.9	9.5
22	1.8	2.0	1.7	1.4	1.9	3.9	23	79	33	10	3.6	3.8
23	1.8	1.9	2.0	1.4	1.9	3.7	26	68	38	9.0	5.0	3.1
24	1.8	1.8	1.9	1.5	1.9	3.8	28	54	31	8.5	4.7	4.0
25	1.9	1.8	2.0	1.5	1.9	4.1	31	43	29	8.0	3.9	2.6
26	1.8	1.8	2.0	1.5	1.9	4.0	29	37	27	7.0	3.8	2.0
27	1.9	1.7	2.0	1.5	1.9	4.4	26	31	20	6.5	3.7	3.0
28	1.9	1.8	1.7	1.5	1.9	4.5	18	30	25	5.5	3.7	3.5
29	1.5	2.0	1.8	1.5	1.9	4.3	15	30	24	5.0	3.3	4.2
30	2.3	1.8	1.9	1.5	---	4.3	14	30	24	4.0	3.4	4.0
31	1.9	---	2.0	1.5	---	4.3	---	30	---	3.0	3.4	---
TOTAL	69.9	62.9	58.7	48.0	51.9	95.9	399.6	2605	1353	434.5	160.5	95.0
MEAN	2.25	2.10	1.89	1.55	1.79	3.09	13.3	84.0	45.1	14.0	5.18	3.17
MAX	3.9	4.2	2.3	2.0	1.9	4.5	37	262	76	26	9.7	9.5
MIN	1.5	1.7	1.5	1.4	1.6	2.0	3.0	20	20	3.0	2.7	1.7
AC-FT	139	125	116	95	103	190	793	5170	2680	862	318	188

CAL YR 1983 TOTAL 2832.26 MEAN 7.76 MAX 66 MIN .72 AC-FT 5620
WTR YR 1984 TOTAL 5434.9 MEAN 14.8 MAX 262 MIN 1.4 AC-FT 10780

NOTE.--NO GAGE-HEIGHT RECORD JAN. 28 TO MAR. 6, JULY 17-31.

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°47'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 475 ft upstream from confluence with Wilson Creek, about 1,000 ft southwest of Gossard ranch house, and 2 mi north of Axial.

DRAINAGE AREA.--7.22 mi^2.

PERIOD OF RECORD.--Streamflow records, July 1975 to current year. Water-quality data available, July 1975 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft, from topographic map. Prior to Mar. 28, 1980, gage 25 ft upstream at datum 0.08, ft higher.

REMARKS.--Records fair. No diversions. Low dam to prevent erosion, 75 ft upstream.

AVERAGE DISCHARGE.--9 years, 0.49 ft^3/s; 355 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41 ft^3/s, May 15, 1984, gage height, 2.25 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41 ft^3/s at 2300 May 15, gage height, 2.25 ft; minimum daily 0.01 ft^3/s, Dec. 25 to Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.14	.09	.01	.01	.03	.79	4.5	10	5.0	1.6	.90
2	.49	.12	.09	.01	.01	.05	.76	5.6	11	4.5	1.5	.90
3	.54	.12	.10	.01	.01	.05	.76	5.5	11	4.5	1.5	.80
4	.26	.12	.10	.01	.01	.10	.73	5.8	12	4.0	1.4	.80
5	.19	.12	.10	.01	.01	.15	.68	6.2	14	4.0	1.4	.80
6	.18	.12	.09	.01	.01	.15	.71	6.5	16	4.0	1.4	.70
7	.14	.12	.08	.01	.01	.20	.79	6.2	17	3.5	1.3	.70
8	.16	.49	.09	.01	.01	.20	.82	6.2	17	3.5	1.3	.70
9	.16	.16	.12	.01	.01	.25	1.1	6.5	16	3.0	1.3	.70
10	.35	.12	.15	.01	.01	.25	1.1	7.0	16	3.0	1.2	1.5
11	.11	.12	.15	.01	.01	.25	1.7	19	15	2.9	1.2	1.3
12	.09	.12	.15	.01	.01	.30	1.7	25	14	2.7	1.2	1.0
13	.09	.10	.15	.01	.01	.30	1.6	34	13	3.0	1.1	.90
14	.33	.10	.12	.01	.01	.30	1.6	38	12	3.0	1.1	.80
15	.12	.10	.10	.01	.01	.35	1.5	36	12	2.8	1.1	.70
16	.11	.10	.10	.01	.01	.35	1.6	35	11	2.8	1.2	.60
17	.14	.12	.10	.01	.01	.35	1.7	32	11	2.7	1.1	.60
18	.24	.11	.10	.01	.01	.40	2.5	29	10	2.5	1.5	.60
19	.14	.09	.10	.01	.01	.40	2.6	25	9.5	2.5	2.0	.60
20	.09	.09	.09	.01	.01	.40	2.5	22	9.0	2.3	3.0	.60
21	.09	.09	.05	.01	.01	.40	2.1	21	8.5	2.3	2.0	2.0
22	.11	.09	.04	.01	.01	.40	2.1	22	8.0	2.4	1.5	1.0
23	.09	.09	.03	.01	.01	.40	2.1	21	7.5	2.1	1.2	.60
24	.11	.09	.02	.01	.01	.45	2.5	20	7.0	2.1	1.1	.60
25	.14	.09	.01	.01	.01	.45	3.4	18	7.0	2.3	1.1	.50
26	.11	.09	.01	.01	.01	.45	4.0	17	6.5	2.0	1.0	.50
27	.11	.09	.01	.01	.01	.44	3.8	16	6.0	2.0	1.0	.50
28	.12	.09	.01	.01	.01	.44	3.7	15	5.5	1.8	1.0	.40
29	.08	.09	.01	.01	.01	.52	4.0	12	5.5	1.8	1.0	.40
30	.12	.09	.01	.01	---	.63	4.1	9.5	5.0	1.6	.90	.40
31	.12	---	.01	.01	---	.73	---	10	---	1.6	.90	---
TOTAL	5.34	3.58	2.38	.31	.29	10.14	59.04	536.5	323.0	88.2	41.10	23.10
MEAN	.17	.12	.08	.01	.01	.33	1.97	17.3	10.8	2.85	1.33	.77
MAX	.54	.49	.15	.01	.01	.73	4.1	38	17	5.0	3.0	2.0
MIN	.08	.09	.01	.01	.01	.03	.68	4.5	5.0	1.6	.90	.40
AC-FT	11	7.1	4.7	.6	.6	20	117	1060	641	175	82	46

CAL YR 1983	TOTAL	193.80	MEAN	.53	MAX	4.5	MIN	.00	AC-FT	384
WTR YR 1984	TOTAL	1092.98	MEAN	2.99	MAX	38	MIN	.01	AC-FT	2170

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft downstream from bridge on U.S. Highway 40, 2.0 mi downstream from Lay Creek, and 3.0 mi east of Maybell.

DRAINAGE AREA.--3,410 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft, National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres above and about 800 acres below station.

AVERAGE DISCHARGE.--68 years (water years 1917-84), 1,574 ft³/s; 1,140,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,100 ft³/s, May 17, 1984, gage height, 12.42 ft; minimum daily, 2.0 ft³/s, July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 19	2030	8,420	7.71	May 17	1930	*25,100	12.42
Apr. 26	0430	7,820	7.41				

Minimum daily discharge, 305 ft³/s, Oct.1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	478	500	425	425	400	1120	2730	14500	7200	1760	611
2	325	478	500	425	425	400	1250	3470	16000	7080	1710	629
3	442	511	500	425	425	400	1120	5700	15500	6420	1650	753
4	484	504	500	450	425	400	1010	4930	13800	6020	1410	730
5	602	484	475	450	425	400	1070	5340	13200	5460	1230	628
6	539	472	425	450	425	400	1410	5870	13600	5040	1180	544
7	518	478	400	450	425	400	1990	5060	14100	4600	1180	485
8	567	497	425	450	425	400	2420	4190	15900	4300	1160	448
9	532	581	425	450	425	400	3040	5500	14500	4280	1060	447
10	497	694	450	425	425	400	2860	8000	12700	5280	932	480
11	504	616	450	425	425	400	2260	10000	10500	6260	856	483
12	686	574	450	425	425	400	2320	12600	9620	4390	807	500
13	718	595	450	425	425	400	1820	15900	9420	3590	760	568
14	670	623	450	425	425	400	1680	19600	9500	3400	731	746
15	686	646	450	425	425	400	1660	20600	10400	3370	676	762
16	758	581	425	425	400	425	2120	22500	11200	3110	671	648
17	718	525	425	425	400	450	3100	24400	11400	2700	695	569
18	686	588	450	425	400	475	4630	23200	10700	2430	658	674
19	646	600	425	425	400	475	7460	21300	9970	2180	637	704
20	678	600	425	425	400	500	7280	18600	9470	1980	776	611
21	710	600	425	425	400	525	5330	18100	9320	1870	1060	586
22	609	550	425	425	400	575	3720	19600	9300	1790	1290	622
23	595	500	425	425	400	600	3520	19600	9470	1780	1070	740
24	574	475	425	425	400	600	4720	19500	8970	1810	908	758
25	574	475	425	425	400	800	6540	20400	8470	1950	855	723
26	560	425	400	425	400	1030	7220	20700	8150	1940	895	680
27	497	425	400	425	400	982	4760	18800	7520	1830	884	707
28	490	425	400	425	400	1080	3560	16100	7320	1700	816	703
29	497	425	400	425	400	962	2980	14600	7180	1570	704	710
30	484	450	400	425	---	986	2790	13600	7040	1550	634	694
31	478	---	400	425	---	1040	---	13600	---	1590	618	---
TOTAL	17629	15875	13525	13325	11975	17505	96760	434090	328720	108470	30273	18943
MEAN	569	529	436	430	413	565	3225	14000	10960	3499	977	631
MAX	758	694	500	450	425	1080	7460	24400	16000	7200	1760	762
MIN	305	425	400	425	400	400	1010	2730	7040	1550	618	447
AC-FT	34970	31490	26830	26430	23750	34720	191900	861000	652000	215200	60050	37570

CAL YR 1983 TOTAL 794354 MEAN 2176 MAX 13200 MIN 180 AC-FT 1576000
WTR YR 1984 TOTAL 1107090 MEAN 3025 MAX 24400 MIN 305 AC-FT 2196000

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURES: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1983.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1200 micromhos Apr. 6,7, 1984; minimum, 89 micromhos June 27, 1983.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, 0.0°C many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,180 mg/l, Aug. 16, 1981; minimum daily, 1 mg/l, several days during December 1975 to February 1976, Jan. 6, 1980.
SEDIMENT LOADS: Maximum daily, 47,100 tons May 9, 1958; minimum daily, 0.04 ton Oct. 2, 3, 1982

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1200 micromhos Apr. 6, 7; minimum 170 micromhos June 25, 30, July 1, 2, 4.
WATER TEMPERATURES: Maximum, 25.0°C, Aug. 9; minimum 0.0°C, many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
DEC										
01...	1155	503	600	8.9	.0	3.0	11.8	K4	27	240
FEB										
28...	1515	404	827	8.0	.0	6.3	--	K3	K13	310
JUN										
06...	1045	12800	263	8.4	9.0	200	8.7	270	250	100
SEP										
18...	1430	717	555	9.1	18.5	16	9.2	K13	64	210

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
DEC										
01...	48	28	44	1	2.2	150	160	12	.20	5.9
FEB										
28...	58	39	64	2	2.6	178	240	21	.20	13
JUN										
06...	23	11	12	.5	1.4	64	57	3.8	<.10	8.8
SEP										
18...	44	25	35	1	2.7	129	160	14	.20	5.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
DEC										
01...	391	390	.53	531	.18	.030	.60	.010	.010	.010
FEB										
28...	559	550	.76	610	1.1	.100	.60	.100	.060	.040
JUN										
06...	166	160	.23	5740	.20	.040	3.5	.300	.040	.020
SEP										
18...	386	360	.53	747	<.10	.020	.40	.060	<.010	<.010

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
DEC 01...	30	<1	58	<.5	<1	<1	<3	2	49	3
FEB 28...	20	<1	61	<.5	<1	<1	<3	<1	14	<1
JUN 06...	60	<1	32	<1	<1	1	<3	4	110	<1
SEP 18...	20	<1	52	<1	<1	1	<3	4	20	<1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
DEC 01...	28	13	<.1	<10	6	2	<1	400	<6	18
FEB 28...	41	12	<.1	<10	<1	3	<1	510	<6	12
JUN 06...	9	8	.4	<10	1	<1	<1	160	<6	<3
SEP 18...	29	2	<.1	<10	2	1	<1	360	<6	11

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
17...	1715	718	20	39	--
NOV					
08...	1352	497	13	17	--
13...	1655	595	12	19	--
27...	1655	425	12	14	--
DEC					
01...	1155	503	10	14	--
04...	1430	500	11	15	--
12...	1710	450	17	21	--
18...	1505	450	67	81	--
JAN					
15...	1300	425	11	13	--
22...	1600	425	9	10	--
29...	1615	425	12	14	--
FEB					
06...	1645	425	14	16	--
12...	1445	425	14	16	--
19...	1555	400	15	16	--
26...	1140	400	13	14	--
28...	1515	404	27	29	--
MAR					
03...	1040	400	70	76	--
10...	1425	400	73	79	--
20...	1248	500	126	170	--
27...	1630	982	202	536	--
APR					
02...	1730	1250	859	2900	--
08...	1430	2420	758	4950	--
17...	1130	3100	536	4490	--
22...	1345	3720	499	5010	--
30...	1724	2790	313	2360	--
MAY					
06...	1150	5870	604	9570	--
13...	1310	15900	624	26800	--
14...	1800	19600	2780	147000	--
20...	1215	18600	1600	80400	--
27...	1045	18800	830	42100	--
JUN					
06...	1045	12800	955	33000	83
17...	1225	11400	935	28800	--
JUL					
01...	1220	7200	347	6750	--
10...	2000	5280	775	11000	--
18...	1200	2430	157	1030	--
22...	1210	1790	126	609	--
29...	0925	1570	172	729	--
AUG					
06...	1930	1180	52	166	--
12...	0935	807	21	46	--
19...	0825	637	25	43	--
25...	0950	855	61	141	--
SEP					
03...	0730	753	27	55	--
10...	1835	480	9	12	--
17...	1725	569	66	101	--
27...	1545	707	44	84	--
30...	1430	694	22	41	--

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	473	599	664	747	815	1050	810	210	185	449	587
2	---	472	576	659	747	818	1040	839	219	183	454	597
3	590	475	555	656	747	313	1070	740	216	192	470	588
4	611	475	548	659	750	803	1080	660	220	187	458	565
5	592	477	565	663	752	802	1120	622	229	194	475	603
6	545	480	630	667	752	800	1170	597	258	197	483	577
7	509	487	600	667	745	802	1130	595	291	198	506	596
8	477	483	635	670	742	807	966	620	309	210	505	622
9	466	524	637	674	744	808	845	616	324	225	499	634
10	455	550	596	684	747	809	812	518	327	228	492	634
11	470	537	576	693	746	798	---	415	319	225	512	630
12	472	547	585	702	750	790	960	380	299	241	517	647
13	426	562	600	712	745	788	977	370	276	270	523	663
14	407	586	609	713	743	797	1030	350	263	287	538	682
15	435	581	600	719	746	815	1040	324	233	298	544	612
16	450	565	---	720	755	812	1020	307	219	302	568	565
17	442	579	640	721	766	830	904	294	213	324	583	577
18	449	595	647	729	765	875	766	285	213	322	585	591
19	472	584	653	743	777	923	---	276	212	317	592	571
20	475	552	660	756	811	958	---	277	210	330	634	544
21	438	535	---	764	832	952	585	271	208	337	638	556
22	417	530	692	760	850	975	640	253	199	348	556	597
23	419	554	720	755	864	1010	672	243	188	361	516	652
24	439	546	741	746	873	1010	665	234	188	404	528	655
25	444	536	787	738	880	1000	562	226	185	414	569	625
26	451	550	801	734	865	1000	534	218	190	459	592	667
27	452	585	787	729	850	1000	627	219	197	439	596	691
28	455	560	771	728	831	980	720	218	193	440	575	660
29	462	570	754	731	817	979	761	215	189	440	577	625
30	471	595	710	735	---	1000	790	212	187	433	586	608
31	474	---	682	744	---	1030	---	206	---	440	587	---
MEAN	471	538	654	711	784	884	872	400	233	304	539	614

WTR YR 1984 MEAN 581 MAX 1170 MIN 183

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	11.5	---	---	.5	.0	.0	.0	.0	.0		
2	12.5	11.0	8.5	7.0	.5	.0	.0	.0	.0	.0		
3	10.5	9.0	9.0	6.5	.5	.0	.0	.0	.0	.0		
4	11.0	7.5	8.5	6.0	.5	.0	.0	.0	.0	.0		
5	12.5	9.0	7.5	6.5	.0	.0	.0	.0	.0	.0		
6	13.5	10.5	8.5	5.5	.0	.0	.0	.0	.0	.0		
7	14.5	11.5	8.5	6.5	.5	.0	.0	.0	.0	.0		
8	14.5	12.0	8.5	4.5	.5	.0	.0	.0	.0	.0		
9	14.5	12.5	5.0	3.0	.5	.0	.0	.0	.0	.0		
10	14.0	12.5	4.5	3.0	.5	.0	.0	.0	.0	.0		
11	---	---	4.0	3.0	.5	.0	.0	.0	.0	.0		
12	---	---	5.0	3.0	.5	.0	.0	.0	.0	.0		
13	---	---	5.0	3.0	.0	.0	.0	.0	.0	.0		
14	---	---	4.5	3.0	.0	.0	.0	.0	.0	.0		
15	---	---	3.0	1.5	.5	.0	.0	.0	.0	.0		
16	---	---	2.5	1.0	.0	.0	.0	.0	.0	.0		
17	---	---	4.0	1.5	.5	.0	.0	.0	.0	.0		
18	---	---	3.5	2.5	.0	.0	.0	.0	---	---		
19	---	---	3.0	1.5	.0	.0	.0	.0	---	---		
20	---	---	2.5	1.0	.0	.0	.0	.0	---	---		
21	---	---	1.0	.0	.0	.0	.0	.0	---	---		
22	---	---	.0	.0	.0	.0	.0	.0	---	---		
23	---	---	.5	.0	.0	.0	.0	.0	---	---		
24	---	---	.5	.0	.0	.0	.0	.0	---	---		
25	---	---	.5	.0	.0	.0	.0	.0	---	---		
26	---	---	.0	.0	.0	.0	.0	.0	---	---		
27	---	---	.0	.0	.0	.0	.0	.0	---	---		
28	---	---	.0	.0	.0	.0	.0	.0	---	---		
29	---	---	.0	.0	1.5	.0	.0	.0	---	---		
30	---	---	.0	.0	1.5	.5	.0	.0	---	---		
31	---	---	---	---	.5	.0	.0	.0	---	---		
MONTH	15.5	7.5	9.0	.0	1.5	.0	.0	.0	.0	.0		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	12.0	11.0	15.5	14.0	22.5	21.0	21.0	19.0
2			---	---	12.5	10.5	16.5	14.5	23.0	20.5	20.5	17.0
3			---	---	12.5	11.0	17.5	15.5	23.0	20.0	21.0	17.0
4			---	---	11.5	10.5	17.5	16.0	23.5	20.0	20.5	17.0
5			---	---	11.5	10.5	18.0	16.0	23.0	20.5	20.5	17.5
6			---	---	10.5	8.0	18.5	16.5	23.5	20.0	20.0	18.0
7			---	---	9.0	7.5	18.5	17.0	24.0	20.0	18.0	15.5
8			---	---	8.5	7.5	19.0	17.0	24.0	20.0	17.5	13.5
9			11.0	7.5	9.0	7.0	19.0	17.0	25.0	20.5	19.0	15.5
10			11.5	10.0	10.0	8.5	18.5	17.0	24.5	20.5	19.5	16.5
11			11.0	10.0	12.0	9.5	18.0	16.5	24.5	21.0	18.5	16.5
12			11.5	10.5	13.5	11.5	19.5	17.0	23.5	21.5	19.0	15.5
13			13.0	10.5	14.0	13.0	19.5	18.0	23.5	20.5	20.0	17.0
14			12.5	11.5	15.0	13.5	21.0	17.5	24.0	20.5	20.0	17.5
15			12.0	11.0	15.0	14.0	21.0	18.5	23.0	20.5	20.0	17.5
16			12.0	10.5	14.5	13.5	22.0	19.0	23.5	20.5	19.0	17.0
17			11.5	10.0	13.5	12.0	22.0	19.0	24.5	20.5	19.0	15.5
18			11.5	10.5	14.0	13.0	22.5	19.5	23.5	21.5	19.5	16.0
19			11.5	10.0	14.0	13.0	23.0	20.0	22.5	20.5	20.0	17.0
20			12.5	10.5	14.0	13.0	23.5	20.5	21.0	19.0	19.5	16.5
21			12.5	11.0	14.0	12.5	24.0	21.0	21.5	17.5	18.0	16.0
22			12.5	10.5	15.0	13.0	23.0	21.0	22.0	19.0	17.0	14.5
23			13.5	11.5	15.0	13.5	23.5	20.5	20.5	19.0	16.5	14.5
24			13.5	11.5	15.0	14.0	24.0	20.5	22.0	18.5	15.5	10.5
25			12.0	11.0	15.0	14.0	23.0	21.0	21.0	19.5	12.0	9.5
26			11.5	10.0	14.5	13.0	23.0	21.0	21.5	18.0	12.5	9.5
27			13.0	10.5	15.5	13.0	23.5	20.0	22.0	18.5	13.5	10.5
28			13.0	11.0	16.5	14.5	23.5	21.0	22.5	19.0	12.5	10.0
29			13.5	11.5	16.5	15.0	23.5	20.5	22.5	19.0	12.5	9.5
30			13.5	12.0	16.5	15.0	23.0	21.0	22.5	19.0	12.5	9.5
31			13.0	12.0	---	---	23.0	20.5	21.5	19.5	---	---
MONTH			13.5	7.5	16.5	7.0	24.0	14.0	25.0	17.5	21.0	9.5
YEAR	25.0	.0										

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

AVERAGE DISCHARGE.--39 years, 237 ft^3/s; 171,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,780 ft^3/s, May 23, 1984, gage height, 8.78 ft; maximum gage height, 8.95 ft, Apr. 25, 1974; minimum daily discharge, 8.6 ft^3/s, Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 23	2300	*4,780	8.78	June 15	2300	2,410	7.20

Minimum daily discharge, 25 ft^3/s, Nov. 28-30, Dec. 1-3, 6-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	66	25	30	35	40	56	187	3380	1070	144	69
2	70	64	25	30	35	40	56	198	2850	989	129	62
3	98	64	25	35	35	40	54	208	2700	912	109	50
4	79	61	30	40	35	45	54	235	2670	842	91	46
5	85	59	30	45	35	45	58	265	2720	774	100	41
6	83	59	25	40	35	40	72	244	2550	709	103	39
7	76	58	25	40	35	40	85	222	2460	657	86	55
8	68	50	25	40	35	40	89	264	2070	637	75	64
9	65	45	25	40	35	45	100	465	1940	741	73	52
10	75	45	30	40	40	50	92	959	1680	676	67	43
11	88	40	30	40	40	55	93	1520	1650	493	64	54
12	74	40	30	40	40	55	86	1850	1630	425	64	142
13	65	40	30	40	40	60	87	2210	1710	419	65	137
14	78	35	30	40	40	59	83	2520	1980	434	68	85
15	83	35	30	35	40	60	90	3100	2190	332	68	61
16	71	40	30	30	40	59	109	3630	2240	289	83	82
17	74	40	30	30	35	55	145	3560	2080	258	71	86
18	97	40	30	30	35	56	226	3100	1950	228	71	61
19	115	35	30	30	35	50	274	2960	1850	206	84	55
20	88	35	30	30	35	52	273	3340	1820	191	145	71
21	80	35	30	30	35	53	233	3630	1800	190	100	124
22	75	35	30	30	35	54	211	3430	1770	197	74	155
23	74	30	30	35	35	55	231	3630	1640	170	72	85
24	73	30	30	35	40	55	270	3960	1540	159	65	77
25	63	30	30	35	40	59	300	3370	1460	155	65	109
26	65	30	30	35	40	66	244	2750	1360	143	67	115
27	65	30	30	35	40	65	207	2760	1280	129	57	126
28	63	25	30	35	40	62	185	2600	1220	133	52	96
29	62	25	30	40	40	57	174	2660	1180	124	50	78
30	58	25	30	35	---	57	167	2910	1140	136	46	76
31	62	---	30	35	---	57	---	3060	---	125	44	---
TOTAL	2313	1246	895	1105	1080	1626	4404	65797	58510	12943	2454	2396
MEAN	74.6	41.5	28.9	35.6	37.2	52.5	147	2122	1950	418	79.2	79.9
MAX	115	66	30	45	40	66	300	3960	3380	1070	145	155
MIN	41	25	25	30	35	40	54	187	1140	124	44	39
AC-FT	4590	2470	1780	2190	2140	3230	8740	130500	116100	25670	4870	4750

CAL YR 1983 TOTAL 139323 MEAN 382 MAX 3310 MIN 25 AC-FT 276300
WTR YR 1984 TOTAL 154769 MEAN 423 MAX 3960 MIN 25 AC-FT 307000

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

REMARKS.--Chemical quality data are furnished by the Wyoming Department of Agriculture.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 06...	1155	83	141	8.8	7.5	10.3	59	18	3.4	4.6	.3
APR 19...	1450	259	154	8.0	6.0	9.7	72	21	4.8	6.0	.3
MAY 31...	1435	2650	57	8.0	8.0	9.0	19	7.7	.00	2.0	.2
JUL 10...	0930	770	64	8.0	10.0	9.6	31	8.7	2.2	1.2	.0
AUG 21...	1215	100	133	8.9	15.0	9.5	64	18	4.6	8.2	.5
SEP 19...	1045	53	165	8.5	11.0	9.3	75	21	5.4	8.7	.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 06...	.80	62	10	2.6	.10	15	92	.12	21	.00	.030
APR 19...	.80	65	8.9	4.2	.20	17	100	.14	71	.40	.410
MAY 31...	.00	24	.0	.40	.10	11	36	.05	255	.00	.060
JUL 10...	.50	30	1.8	.60	.10	9.7	43	.06	89	.00	.010
AUG 21...	.50	76	7.9	2.2	.20	15	100	.14	28	.00	.000
SEP 19...	.70	75	9.6	10	.10	15	120	.16	17	.00	.020

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT 06...	1155	83	141	7.5	JAN 05...	1430	48	160	.0
NOV 15...	1115	36	171	.0	APR 19...	1450	259	154	6.0

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi^2.

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Records poor. Diversions for irrigation of about 500 acres above station.

AVERAGE DISCHARGE.--53 years (water years 1932-84), 77.0 ft^3/s; 55,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft^3/s May 16, 1984, gage height, 11.78 ft (from floodmark), from rating curve extended above 1,000 ft^3/s.; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 430 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	unknown	* a 2,250	b 11.78	June 16	unknown	c 700	----

a from rating curve extended above 1,000 ft^3/s
b from floodmark
c mean daily discharge

Minimum daily discharge, 20 ft^3/s, Dec. 6 and Mar. 5

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	39	30	30	35	30	43	117	900	275	76	33
2	85	40	30	30	35	25	43	137	800	250	78	38
3	48	40	30	30	35	25	39	135	750	225	53	29
4	45	37	30	30	35	25	39	150	700	225	46	25
5	45	36	25	35	35	20	44	154	700	200	41	23
6	42	36	20	30	35	25	62	126	650	200	47	22
7	39	35	25	30	35	25	80	105	600	200	41	25
8	35	30	30	30	35	25	91	120	550	200	35	31
9	33	30	30	30	35	30	106	250	550	225	29	25
10	47	30	30	30	35	30	77	400	500	189	25	22
11	58	30	30	35	35	35	73	700	500	136	23	24
12	43	30	30	35	30	36	63	800	550	110	21	104
13	35	30	30	30	30	35	60	900	550	101	21	100
14	45	30	30	30	30	40	60	1100	600	100	21	62
15	55	25	30	30	30	36	76	1300	650	90	23	44
16	43	30	30	25	30	41	111	1500	700	76	37	52
17	43	35	30	30	30	31	170	1400	650	67	59	58
18	50	35	30	25	30	42	281	1300	600	59	33	43
19	82	30	30	25	30	34	276	1200	550	54	29	40
20	56	30	30	30	25	38	221	1250	500	49	61	64
21	47	30	30	30	30	43	138	1300	450	46	56	99
22	43	30	30	35	30	47	117	1200	450	46	41	137
23	41	30	30	35	30	40	129	1400	425	54	35	82
24	42	30	30	30	30	50	193	1300	400	53	34	66
25	40	35	30	30	30	46	280	1200	375	89	36	76
26	40	30	30	30	30	42	156	1000	350	79	38	83
27	38	30	35	30	25	44	119	1000	350	56	31	77
28	36	30	35	30	25	43	104	900	325	61	28	63
29	35	30	35	30	30	41	100	800	300	46	27	54
30	33	25	30	30	---	42	95	800	275	56	24	50
31	34	---	30	35	---	45	---	800	---	64	23	---
TOTAL	1447	958	925	945	910	1111	3446	24844	16250	3681	1172	1651
MEAN	46.7	31.9	29.8	30.5	31.4	35.8	115	801	542	119	37.8	55.0
MAX	89	40	35	35	35	50	281	1500	900	275	78	137
MIN	33	25	20	25	25	20	39	105	275	46	21	22
AC-FT	2870	1900	1830	1870	1800	2200	6840	49280	32230	7300	2320	3270

CAL YR 1983 TOTAL 50597 MEAN 139 MAX 1100 MIN 16 AC-FT 100400
WTR YR 1984 TOTAL 57340 MEAN 157 MAX 1500 MIN 20 AC-FT 113700

NOTE.--NO GAGE-HEIGHT RECORD MAY 8 TO JULY 9.

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼NW¼ sec.8, T.12 N., R.90 W., Carbon County WY. Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft, National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft, higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft, higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream, at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream, at present datum.

REMARKS.--Records fair. Diversions for irrigation of about 9,500 acres above station. One diversion above station for irrigation of about 3,000 acres below. Transbasin diversions above station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft^3/s; 372,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s, May 16, 1984, gage height, 13.56 ft, result of dam failure; no flow, Sept. 19, 20, 22, 1977, Aug. 7, 17, 18, 27-29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	1000	b*14,700	13.56	June 16	1900	5,310	9.79

b - Result of dam failure.
Minimum daily discharge during period of operation, 100 ft^3/s, Sept. 5, 6, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							300	1360	7100	2900	378	160
2							300	1220	6450	2700	374	160
3							300	1240	5570	2500	310	130
4							300	1260	5960	2400	289	110
5							300	1400	5790	2200	300	100
6							400	1230	6180	2100	300	100
7							500	1240	6640	1900	280	130
8							500	1210	5060	1700	270	150
9							650	1820	4630	1600	270	120
10							600	3330	3970	1400	250	100
11							600	4830	3550	1190	230	120
12							550	6090	3470	1040	230	230
13							550	8250	3460	910	230	230
14							500	9780	4060	934	230	230
15							550	8840	4720	786	230	160
16							650	10400	4960	696	230	210
17							850	9180	4550	629	230	220
18							1500	7870	4110	547	230	160
19							1600	6570	3900	471	230	150
20							1690	7630	3820	442	250	200
21							1220	8680	3730	416	264	230
22							1290	7600	3770	414	190	230
23							1220	8240	3450	409	170	230
24							1360	9730	3130	395	160	220
25							1970	9240	3000	397	160	230
26							1280	9400	2720	387	160	230
27							1300	9000	3500	339	140	230
28							1450	8500	3400	328	140	230
29							1440	8000	3200	316	140	210
30							1510	8000	3000	325	120	200
31							---	7500	---	371	120	---
TOTAL							27230	188640	130850	33142	7105	5410
MEAN							908	6085	4362	1069	229	180
MAX							1970	10400	7100	2900	378	230
MIN							300	1210	2720	316	120	100
AC-FT							54010	374200	259500	65740	14090	10730

NOTE.--NO GAGE HEIGHT RECORD AUG. 3 TO SEPT. 30.

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

REMARKS.--Chemical quality data are furnished by the Wyoming Department of Agriculture. Pesticide analyses were performed by the USGS Central Lab.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT 06...	1630	146	272	8.4	13.0	9.0	130	38	7.9	8.8	.4
APR 20...	1345	1650	308	8.0	3.0	10.5	140	37	11	15	.6
JUN 01...	1145	7130	124	8.1	8.5	8.5	55	17	3.0	5.0	.3
JUL 10...	1415	915	174	8.3	19.5	6.8	77	21	6.0	4.9	.3
AUG 21...	1725	239	267	8.6	20.0	8.2	130	36	8.8	12	.5
SEP 19...	1600	187	310	8.6	18.0	8.2	150	41	11	12	.4

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 06...	2.4	120	27	4.0	.20	17	180	.24	70	.00	.060
APR 20...	1.6	110	50	12	.20	14	210	.28	921	.30	.100
JUN 01...	.00	59	4.0	2.8	.10	11	78	.11	1510	.10	.080
JUL 10...	1.2	75	15	1.8	.00	13	110	.15	266	.00	.010
AUG 21...	2.1	110	29	3.8	.20	16	170	.24	112	.00	.000
SEP 19...	1.4	130	34	4.2	.20	15	200	.27	99	.00	.020

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	DICAMBA (MEDIBEN) (BANVEL D) TOTAL (UG/L)	PICLORAM (TORDON) (AMDON) TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 06...	<.01	<.01	<.01	<.010	<.010	<.01
JUN 01...	<.01	<.01	<.01	<.010	<.010	<.01
AUG 21...	<.01	<.01	<.01	<.010	<.010	<.01
SEP 19...	<.01	<.01	<.01	<.010	<.010	<.01

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs. 8 and 17, T.11 N., R.90 W., Moffat County, Co., Hydrologic Unit 14050003, on right bank 6.2 mi south of Colorado-Wyoming State line, 8.0 mi upstream from mouth, and 8.3 mi south of Dixon.

DRAINAGE AREA.--24 mi², approximately.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft, from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft.

AVERAGE DISCHARGE.--31 years, 10.5 ft³/s; 7,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 476 ft³/s, May 10, 1984, gage height, 6.02 ft, from rating curve extended above 160 ft³/s; Maximum gage-height, 7.08 ft, Apr.18, 1984 (back water from ice); no flow Sept. 17-19, 1955, many days July through September 1977, and Aug. 8-16, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 18	1730	---	*a7.08	May 10	2025	*476	6.02
Apr. 19	----	b100	----	June 1	0330	209	4.56
Apr. 25	0150	368	5.61	June 5	1700	261	4.89
May 3	2025	199	4.67	June 15	1630	106	3.86

a Backwater from ice.
b Mean daily discharge.

Minimum daily discharge, 2.0 ft³/s, Aug. 8 and 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	6.6	4.0	2.5	2.8	3.0	11	52	154	37	13	4.7
2	7.9	6.4	4.0	2.5	2.8	3.0	9.0	76	90	35	11	4.2
3	9.0	6.2	3.9	2.5	2.8	3.1	8.0	76	90	34	5.0	3.5
4	6.6	6.2	3.9	2.5	2.8	3.1	10	67	79	34	3.7	3.3
5	6.9	6.0	3.8	2.5	2.8	3.2	11	83	161	33	3.0	3.1
6	6.4	6.0	3.7	2.5	2.8	3.3	14	38	136	33	2.4	2.9
7	8.0	6.0	3.6	2.5	2.8	3.6	20	26	101	32	2.1	3.3
8	7.5	5.8	3.5	2.5	2.8	4.5	24	62	92	40	2.0	3.9
9	7.0	5.8	3.5	2.5	2.8	5.4	32	180	84	48	2.0	3.1
10	8.0	5.6	3.4	2.5	2.8	5.2	20	280	58	42	2.1	2.9
11	11	5.6	3.4	2.5	2.8	7.3	15	256	53	35	2.2	9.4
12	10	5.6	3.3	2.5	2.8	6.1	13	230	50	30	2.3	19
13	8.0	5.4	3.2	2.5	2.8	5.6	13	208	58	27	2.9	28
14	7.0	5.4	3.2	2.6	2.8	9.0	14	193	75	22	12	9.7
15	10	5.2	3.1	2.6	2.8	6.6	19	180	88	19	8.1	5.6
16	11	5.2	3.0	2.6	2.9	10	25	173	83	18	6.0	12
17	9.0	5.0	3.0	2.6	2.9	6.7	40	116	70	16	5.2	6.5
18	11	5.0	2.9	2.6	2.9	13	70	97	67	14	17	4.7
19	13	4.9	2.9	2.6	2.9	7.6	100	89	71	12	12	12
20	17	4.8	2.8	2.6	2.9	8.4	56	101	73	23	7.0	9.8
21	10	4.7	2.8	2.6	2.9	15	28	105	68	42	6.6	16
22	9.4	4.6	2.8	2.7	2.9	10	23	89	69	27	6.2	13
23	8.6	4.6	2.7	2.7	2.9	9.0	52	99	58	34	5.7	7.2
24	8.4	4.5	2.7	2.7	2.9	17	114	99	56	27	6.1	6.4
25	8.4	4.5	2.7	2.7	2.9	12	166	75	52	21	7.0	14
26	8.2	4.4	2.7	2.7	3.0	9.0	37	70	48	15	10	12
27	8.0	4.3	2.6	2.7	3.0	12	26	76	45	12	5.1	11
28	7.6	4.2	2.6	2.7	3.0	10	23	103	43	13	4.1	8.1
29	7.2	4.2	2.6	2.8	3.0	8.6	18	70	40	22	3.7	6.5
30	7.0	4.1	2.5	2.8	---	10	20	62	39	20	3.5	6.0
31	6.8	---	2.5	2.8	---	13	---	96	---	17	3.5	---
TOTAL	268.8	156.8	97.3	80.6	83.0	243.3	1031.0	3527	2251	834	182.5	251.8
MEAN	8.67	5.23	3.14	2.60	2.86	7.85	34.4	114	75.0	26.9	5.89	8.39
MAX	17	6.6	4.0	2.8	3.0	17	166	280	161	48	17	28
MIN	4.9	4.1	2.5	2.5	2.8	3.0	8.0	26	39	12	2.0	2.9
AC-FT	533	311	193	160	165	483	2040	7000	4460	1650	362	499

CAL YR 1983 TOTAL 7802.1 MEAN 21.4 MAX 149 MIN 2.0 AC-FT 15480
WTR YR 1984 TOTAL 9007.1 MEAN 24.6 MAX 280 MIN 2.0 AC-FT 17870

NOTE.--NO GAGE-HEIGHT RECORD OCT. 7 TO MAR. 8.

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

WATER QUALITY RECORDS

LOCATION.--Lat 41°01'43", long 107°41'14", in SE¼NW¼NW¼ sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

PERIOD OF RECORD.--October 1980 to current year.

REMARKS.--Chemical quality data are furnished by the Wyoming Department of Agriculture. Pesticide and nutrient analyses were performed by the USGS Central Lab.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT										
06...	1745	280	406	8.4	13.0	170	9.0	210	130	35
NOV										
15...	1420	162	408	8.7	1.0	40	11.6	K23	180	47
JAN										
06...	1430	222	425	8.0	.0	10	10.8	44	190	50
MAR										
09...	1505	170	480	8.2	.0	10	10.5	41	--	--
APR										
20...	1540	E2000	--	8.1	4.0	1000	9.6	K180	150	36
JUN										
01...	1515	7370	175	8.2	12.5	120	8.5	1000	--	--
JUL										
13...	1540	E1000	280	8.4	19.0	50	6.7	K200	--	--
AUG										
22...	1020	231	430	8.4	18.5	80	7.6	340	--	--
SEP										
20...	0830	192	400	8.5	14.0	330	7.7	600	160	41

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT										
06...	11	21	.8	2.0	120	62	6.2	.20	16	230
NOV										
15...	14	27	.9	1.5	160	67	6.2	.20	17	280
JAN										
06...	15	29	1	2.0	170	67	7.3	.40	21	290
MAR										
09...	--	--	--	--	--	--	--	--	--	--
APR										
20...	14	36	1	1.6	110	110	5.6	.20	10	280
JUN										
01...	--	--	--	--	--	--	--	--	--	--
JUL										
13...	--	--	--	--	--	--	--	--	--	--
AUG										
22...	--	--	--	--	--	--	--	--	--	--
SEP										
20...	13	25	.9	1.6	140	69	6.9	.20	12	250

E ESTIMATED.
K BASED ON NON-IDEAL COLONY COUNT.

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 06...	.31	170	<.10	.08	.010	.29	.30	--	.170
NOV 15...	.38	121	<.10	.00	.050	1.1	1.1	--	.020
JAN 06...	.40	176	.10	.30	.030	--	<.20	--	.020
MAR 09...	--	--	.10	--	.080	.22	.30	.40	.050
APR 20...	.38	--	.30	.30	.110	4.4	4.5	4.8	4.10
JUN 01...	--	--	.20	--	.090	.41	.50	.70	.200
JUL 13...	--	--	<.10	--	.040	.46	.50	--	.120
AUG 22...	--	--	<.10	--	.070	.33	.40	--	.120
SEP 20...	.34	131	<.10	.00	.040	.96	1.0	--	.380

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	DICAMBA (MEDIBEN) (BANVEL D) TOTAL (UG/L)	PICLORAM (TORDON) (AMDON) TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 06...	1745	<.01	<.01	<.01	<.010	.010	<.01
AUG 22...	1020	.01	<.01	<.01	<.010	.010	<.01
SEP 20...	0830	<.01	<.01	<.01	<.010	.010	<.01

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft downstream from highway bridge, 6.0 mi north of Lily, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,730 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft, from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 21,000 acres above station.

AVERAGE DISCHARGE.--63 years, 590 ft³/s; 427,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft³/s, May 18, 1984, gage height, 9.85 ft; maximum gage height, 11.1 ft, Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 20	0430	4,510	5.68	May 18	0030	*16,700	9.85
Apr. 26	1000	3,620	5.21	June 3	0600	8,420	7.39
				June 17	1230	5,290	6.07

Minimum daily discharge, 100 ft³/s, Nov. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	215	225	200	200	160	621	1220	6450	2200	684	173
2	170	208	225	200	200	160	670	1260	7150	2140	559	170
3	170	208	225	200	200	160	690	1750	7940	1960	641	300
4	158	212	225	210	200	160	647	1820	6180	1810	522	280
5	320	215	215	210	200	160	648	1730	6090	1690	441	190
6	324	215	200	210	200	160	815	1780	5990	1600	396	170
7	271	212	190	210	200	160	1100	1670	6830	1420	357	160
8	250	243	200	210	200	160	1300	1400	6640	1350	326	160
9	240	229	200	210	200	160	1530	1260	6300	1280	315	160
10	215	233	210	200	200	160	1740	1610	5440	1290	301	170
11	208	240	210	200	200	175	1250	3220	4560	1460	271	170
12	198	250	210	200	200	175	970	5120	3900	1350	248	200
13	212	240	210	200	200	180	823	5990	3720	1140	236	225
14	264	247	210	200	200	190	691	7130	3620	1010	217	300
15	275	250	210	200	200	190	687	9210	4010	930	212	325
16	360	240	200	200	190	200	778	10800	4630	896	213	250
17	385	215	200	200	190	200	1180	12500	5010	787	234	200
18	306	180	210	200	180	200	1850	13400	4710	698	295	300
19	271	230	200	200	180	250	3000	10700	4200	618	356	321
20	261	230	200	200	180	300	3730	8980	3840	541	304	364
21	284	200	200	200	170	350	2880	8210	3700	476	327	307
22	306	175	200	200	170	400	1870	8690	3570	576	270	274
23	268	150	200	200	170	450	1510	9030	3600	452	321	251
24	261	110	200	200	170	500	1430	8020	3330	440	317	387
25	250	100	200	200	160	550	1770	8510	3060	503	268	414
26	240	125	190	200	160	600	3010	9650	2890	645	249	330
27	240	150	190	200	160	650	2230	7420	2720	664	244	410
28	229	175	190	200	160	749	1620	6000	2570	551	237	442
29	219	200	190	200	160	715	1510	5830	2420	441	219	379
30	215	210	190	200	---	700	1480	5460	2300	406	198	370
31	212	---	190	200	---	706	---	5700	---	397	180	---
TOTAL	7752	6107	6315	6260	5400	10030	44030	185070	137370	31721	9958	8152
MEAN	250	204	204	202	186	324	1468	5970	4579	1023	321	272
MAX	385	250	225	210	200	749	3730	13400	7940	2200	684	442
MIN	158	100	190	200	160	160	621	1220	2300	397	180	160
AC-FT	15380	12110	12530	12420	10710	19890	87330	367100	272500	62920	19750	16170

CAL YR 1983	TOTAL	346605	MEAN	950	MAX	7100	MIN	47	AC-FT	687500
WTR YR 1984	TOTAL	458165	MEAN	1252	MAX	13400	MIN	100	AC-FT	908800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 7 TO JAN. 10.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION:--Water-quality monitor since July 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11, 1977; minimum, 122 micromhos June 20, 1978.
WATER TEMPERATURES: Maximum, 32.0°C Aug. ,1981; minimum, 0.0°C many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 28.5°C July 24; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 29...	1400	200	540	8.5	.0	75	11.3	K6	K40	200
FEB 28...	1130	164	605	8.0	.0	19	8.8	K5	20	210
JUN 05...	1100	6030	219	8.3	11.0	70	8.5	K440	150	80
SEP 18...	0930	291	540	8.6	14.0	70	8.1	640	3000	160

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
NOV 29...	54	16	50	2	1.5	185	93	12	.30	17
FEB 28...	56	16	46	1	2.0	192	110	12	.30	19
JUN 05...	22	6.1	15	.8	.60	66	39	5.4	.20	12
SEP 18...	45	11	54	2	2.3	139	110	16	.30	13

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
NOV 29...	361	360	.49	195	<.10	.020	.60	.160	.010	.020
FEB 28...	396	380	.54	175	.15	.030	.30	.080	.010	.020
JUN 05...	151	140	.21	2460	.16	.070	1.0	.450	.030	.060
SEP 18...	359	340	.49	282	<.10	.010	1.3	.850	.020	.040

K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV										
29...	<10	1	48	.9	<1	<1	<3	1	6	<1
FEB										
28...	10	1	60	<.5	<1	<1	<3	2	11	<1
JUN										
05...	30	<1	27	<1	<1	<1	<3	11	40	<1
SEP										
18...	10	2	33	<1	<1	<1	<3	16	9	<1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
NOV										
29...	22	3	<.1	<10	7	1	<1	350	<6	8
FEB										
28...	22	9	<.1	<10	<1	<1	<1	340	<6	17
JUN										
05...	12	<1	<.1	<10	<1	<1	<1	140	<6	<3
SEP										
18...	21	4	<.1	<10	1	<1	<1	290	<6	5

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
02...	1100	170	1360	624	--
09...	1450	240	2020	1310	--
16...	1750	360	3680	3580	--
22...	1600	306	1190	983	--
30...	1250	215	634	368	--
NOV					
06...	1510	215	405	235	--
13...	1555	240	672	435	--
24...	1650	110	565	168	--
29...	1400	200	821	443	33
DEC					
04...	1040	225	788	479	--
11...	1655	210	505	286	--
JAN					
14...	1545	200	2790	1510	--
22...	1500	200	118	64	--
29...	1505	200	49	26	--
FEB					
05...	1155	200	60	32	--
12...	1330	200	780	421	--
19...	1345	180	38	18	--
26...	1040	160	31	13	--
MAR					
03...	0939	160	94	41	--
10...	1330	160	66	29	--
20...	1027	300	475	385	--
24...	1035	500	4840	6530	--
APR					
17...	1030	1180	4440	14100	--
22...	1226	1870	7510	37900	--
29...	1216	1510	3330	13600	--
MAY					
06...	1100	1780	3250	15600	--
13...	1310	5990	5260	85100	--
20...	1705	8980	3750	90800	--
27...	1445	7420	3560	71200	--
JUN					
03...	1205	7940	3800	81500	--
05...	1100	6030	2410	39200	44
17...	1128	5010	2970	40200	--
JUL					
01...	1105	2200	1380	8170	--
07...	1745	1420	635	2430	--
15...	1635	930	593	1490	--
22...	1110	576	17300	27000	--
29...	0825	441	1530	1820	--
AUG					
09...	1750	315	575	489	--
12...	0835	248	346	232	--
19...	0945	356	7420	7130	--
25...	0848	268	698	505	--
SEP					
02...	1055	170	411	189	--
08...	1715	160	134	58	--
16...	1600	250	6700	4520	--
18...	0945	300	6810	5516	--
26...	1815	330	943	840	--
30...	1305	370	1200	1200	--

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		519	575	554	555	---	749	690	---	221	632	---
2		520	557	535	560	---	773	700	220	235	799	---
3		528	566	527	567	---	800	---	240	200	---	---
4		525	560	528	571	---	775	---	240	233	---	---
5		523	572	530	577	---	745	---	230	251	---	---
6		520	567	535	579	---	730	---	238	271	---	---
7		505	559	539	582	---	738	---	243	274	---	---
8		480	560	542	580	---	731	---	265	278	---	---
9		485	560	541	578	---	638	642	262	291	690	---
10		515	558	543	577	---	603	650	---	296	683	---
11		512	566	545	580	---	605	518	---	308	695	---
12		485	562	547	576	---	635	382	291	298	680	---
13		465	548	545	575	---	695	350	273	304	720	---
14		481	545	550	572	---	---	300	262	354	737	---
15		500	545	546	573	---	---	---	243	388	714	---
16		520	553	544	572	---	---	---	211	394	687	620
17		520	558	543	576	---	745	---	197	403	654	555
18		530	564	542	575	---	---	---	---	431	632	537
19		550	577	545	576	---	---	295	192	458	816	590
20		534	568	552	581	---	---	---	193	476	792	568
21		502	572	556	588	---	---	---	193	496	---	589
22		523	580	560	591	---	---	---	195	---	---	620
23		555	589	563	597	---	511	---	192	---	---	574
24		597	592	562	---	---	555	---	185	---	---	532
25		607	599	560	---	---	539	---	---	---	610	474
26		634	605	559	---	---	548	---	195	---	635	462
27		602	604	555	---	---	515	---	184	580	---	475
28		561	595	553	---	---	581	---	215	590	---	580
29		554	576	552	---	685	639	---	220	588	---	---
30		584	568	550	---	674	677	---	223	602	---	520
31		---	562	554	---	711	---	---	---	625	---	---
MEAN		531	570	547	576	690	660	503	224	379	699	550

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	8.5	12.5	5.0	.0	.0	.0	.0	.0	.0	---	---
2	11.0	9.0	10.0	6.0	.0	.0	.0	.0	.0	.0	---	---
3	9.5	7.0	11.5	4.0	.0	.0	.0	.0	.0	.0	---	---
4	13.5	6.0	11.0	3.5	.0	.0	.0	.0	.0	.0	---	---
5	14.5	7.0	7.5	4.0	.0	.0	.0	.0	.0	.0	---	---
6	15.5	8.0	10.0	2.5	.0	.0	.0	.0	.0	.0	---	---
7	16.0	9.5	9.5	4.5	.0	.0	.0	.0	.0	.0	---	---
8	16.5	9.5	6.5	2.0	.0	.0	.5	.0	.0	.0	---	---
9	15.5	9.5	5.0	.0	.0	.0	.0	.0	.0	.0	---	---
10	13.0	10.0	5.0	.5	.0	.0	.0	.0	.0	.0	---	---
11	11.0	8.5	5.5	1.0	.0	.0	.0	.0	.0	.0	---	---
12	13.0	6.5	6.5	1.5	.0	.0	.0	.0	.0	.0	---	---
13	12.0	7.5	7.5	1.5	.0	.0	.0	.0	.0	.0	---	---
14	10.5	7.5	5.5	.5	.0	.0	.0	.0	.0	.0	---	---
15	12.5	6.0	3.0	.0	.0	.0	.0	.0	.0	.0	---	---
16	11.5	6.5	4.0	.0	.0	.0	.5	.0	.0	.0	---	---
17	10.5	5.0	5.5	.0	.0	.0	.5	.0	.0	.0	---	---
18	12.0	8.0	4.0	.5	.0	.0	.0	.0	.0	.0	---	---
19	11.5	4.5	3.0	.0	.0	.0	.0	.0	.0	.0	---	---
20	11.0	3.0	2.0	.0	.0	.0	.0	.0	.0	.0	---	---
21	11.5	3.5	.0	.0	.0	.0	.0	.0	.0	.0	---	---
22	11.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	---	---
23	11.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	---	---
24	9.5	5.5	.0	.0	.0	.0	.0	.0	---	---	---	---
25	10.0	2.5	.0	.0	.0	.0	.0	.0	---	---	---	---
26	11.0	3.0	.0	.0	.0	.0	.0	.0	---	---	---	---
27	11.0	3.5	.0	.0	.0	.0	.0	.0	---	---	---	---
28	11.5	3.5	.0	.0	.0	.0	.0	.0	---	---	---	---
29	12.5	4.0	.0	.0	.0	.0	.0	.0	---	---	3.0	1.0
30	10.0	3.5	.0	.0	.0	.0	.5	.0	---	---	3.0	.0
31	11.5	5.5	---	---	.0	.0	.0	.0	---	---	4.5	.0
MONTH	16.5	2.5	12.5	.0	.0	.0	.5	.0	.0	.0	4.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	1.0	9.5	6.5	---	---	---	---	23.5	20.0	21.5	15.5
2	6.0	1.5	11.5	7.5	---	---	---	---	24.5	18.5	23.5	13.5
3	7.0	2.5	9.0	6.5	---	---	---	---	24.5	18.5	23.5	12.5
4	9.0	1.5	9.5	7.0	---	---	---	---	25.5	18.5	23.0	12.5
5	11.0	3.5	10.5	7.5	12.0	11.0	---	---	22.0	19.0	21.5	13.5
6	9.5	5.0	9.0	6.5	10.5	9.5	21.5	18.5	24.0	17.5	19.5	14.0
7	9.0	5.0	10.0	5.5	10.0	8.0	22.5	19.5	24.5	18.0	18.0	12.0
8	10.0	4.5	12.5	6.5	8.5	7.5	22.5	19.0	24.5	18.5	20.5	9.0
9	8.0	4.5	14.0	8.5	10.0	7.5	23.5	18.5	25.0	18.5	20.5	12.5
10	7.0	3.5	15.0	10.5	11.5	8.0	24.5	18.5	25.5	18.5	21.0	13.0
11	7.0	3.0	14.5	11.5	11.5	8.0	24.5	19.0	25.5	19.0	17.5	14.5
12	7.5	1.5	13.5	10.5	---	---	24.0	19.0	26.0	18.5	19.5	12.5
13	9.0	2.5	13.5	10.5	---	---	22.0	20.0	25.0	17.0	22.0	14.5
14	11.0	2.5	14.5	11.0	---	---	25.0	18.0	26.5	18.0	22.0	13.5
15	13.0	4.5	14.0	11.5	---	---	26.0	19.5	26.0	18.0	20.5	14.0
16	14.0	6.0	13.5	9.5	---	---	26.0	19.5	26.5	18.5	19.0	15.0
17	14.0	7.5	13.5	10.0	16.5	13.5	24.5	18.0	24.5	18.5	21.0	12.0
18	13.0	9.5	13.0	10.5	16.0	13.5	26.5	19.5	25.5	17.5	21.5	13.5
19	11.0	9.5	13.0	9.0	17.0	13.5	26.0	19.5	21.5	16.0	19.0	14.0
20	8.0	5.0	14.5	10.0	17.0	14.5	25.5	18.0	19.0	16.5	19.0	13.0
21	6.0	4.0	14.0	12.0	18.0	13.5	27.0	20.0	23.5	14.0	16.5	13.0
22	7.5	4.0	15.0	11.5	18.0	14.0	23.0	19.5	25.0	16.5	16.0	10.0
23	10.0	5.0	13.0	9.5	19.0	14.5	25.5	19.0	21.0	17.5	15.5	11.0
24	10.5	6.5	14.0	11.0	---	---	28.5	19.5	24.0	16.5	12.5	7.5
25	8.5	5.0	13.0	10.5	18.0	16.0	26.5	19.5	20.5	17.5	11.0	5.5
26	6.5	4.0	13.0	9.0	---	---	25.5	19.0	24.0	15.0	13.5	6.0
27	7.0	2.0	13.0	8.5	---	---	24.0	19.5	24.0	15.5	15.5	8.5
28	7.5	3.0	---	---	---	---	25.5	19.0	23.0	16.0	12.0	6.5
29	6.5	4.0	---	---	---	---	26.0	19.5	23.0	15.5	12.5	5.0
30	8.0	4.0	---	---	---	---	24.5	19.5	23.5	15.5	13.0	6.0
31	---	---	---	---	---	---	25.5	19.0	20.0	16.0	---	---
MONTH	14.0	1.0	15.0	5.5	19.0	7.5	28.5	18.0	26.5	14.0	23.5	5.0
YEAR	28.5	.0										

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'06", long 108°31'28", in SE¼SW¼ sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 1405002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,250 ft upstream from Disappointment Draw, and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi^2, approximately.

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,600 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs,and diversions for irrigation of about 86,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,200 ft^3/s, May 18, 1984, gage height, 19.13 ft; minimum daily, 179 ft^3/s Sept. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 20	0900	12,700	10.31	May 18	0800	*33,200	19.13
Apr. 26	1700	11,300	9.65				

Minimum daily discharge, 390 ft^3/s, Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	398	730	700	625	625	575	1800	3920	19700	10400	2840	800
2	390	685	750	650	650	575	1950	3940	21500	10500	2890	761
3	462	703	750	650	650	575	1850	6480	22800	9520	2950	770
4	586	748	750	650	650	575	1700	7320	21200	8890	2650	942
5	860	757	725	675	650	575	1750	7000	19700	8120	2260	954
6	1130	721	700	675	650	575	2300	7660	19700	7440	2030	790
7	930	694	650	675	650	575	3500	7700	20300	6830	1970	680
8	860	775	625	675	650	575	4000	6310	21900	6350	1890	599
9	880	757	650	675	650	575	4750	5790	22400	5720	1860	550
10	830	811	675	675	650	575	4800	7240	19500	6550	1650	518
11	757	990	675	650	650	575	3750	11500	16700	8240	1420	526
12	766	930	675	650	650	625	3500	15500	13700	7310	1260	635
13	1000	830	675	650	650	625	2750	18200	13300	5520	1200	635
14	1090	860	675	650	650	625	2500	21400	12800	4930	1130	716
15	1070	900	675	650	650	625	2500	24500	13800	4800	1040	1130
16	1120	900	675	650	650	650	3000	28000	15500	4650	966	1440
17	1290	830	650	650	625	650	4000	30600	16800	4160	954	1200
18	1150	685	650	650	625	675	5220	32300	16500	3720	1090	860
19	1030	757	650	650	600	750	8410	30300	15300	3380	1260	918
20	960	850	650	650	600	850	11700	27400	14900	3090	1080	1170
21	1060	800	650	650	600	900	9630	24600	14200	2860	1310	930
22	1120	800	650	650	600	1000	6580	25200	14000	2920	1370	840
23	960	750	650	650	600	1100	5060	26700	14100	2730	1110	820
24	910	650	650	650	600	1150	5180	25600	13900	2690	1310	1070
25	860	600	650	650	575	1250	7680	25800	13000	2830	1390	1560
26	860	625	640	650	575	1650	9970	27600	12400	3050	1260	1280
27	850	600	625	650	575	1650	8680	26500	11700	3140	1330	1040
28	793	625	625	650	575	1850	5910	23200	11200	2810	1290	1330
29	757	650	625	650	575	1700	4820	21400	10800	2550	1130	1200
30	757	675	625	650	---	1700	4360	19800	10500	2470	942	1170
31	748	---	625	650	---	1750	---	19000	---	2500	800	---
TOTAL	27234	22688	20640	20275	18100	28100	143600	568460	483800	160670	47632	27834
MEAN	879	756	666	654	624	906	4787	18340	16130	5183	1537	928
MAX	1290	990	750	675	650	1850	11700	32300	22800	10500	2950	1560
MIN	390	600	625	625	575	575	1700	3920	10500	2470	800	518
AC-FT	54020	45000	40940	40220	35900	55740	284800	1128000	959600	318700	94480	55210

CAL YR 1983 TOTAL 1236351 MEAN 3387 MAX 22900 MIN 273 AC-FT 2452000
WTR YR 1984 TOTAL 1569033 MEAN 4287 MAX 32300 MIN 390 AC-FT 3112000

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from highway bridge, 540 ft upstream from mouth, 0.5 mi downstream from Long Park Creek, and 9 mi northeast of Buford.

DRAINAGE AREA.--21.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft, from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft upstream at present datum.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 23.1 ft^3/s; 16,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft^3/s, May 9, 1974, gage height, 7.53 ft, from rating curve extended above 260 ft^3/s; minimum daily, 0.30 ft^3/s, Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	2200	750	4.49	June 1	0200	475	3.75
May 23	2100	*886	4.86	June 7	0100	475	3.75

Minimum daily discharge, 3.0 ft^3/s, Sept. 7, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.4	4.2	6.2	3.3	3.8	4.2	17	402	29	6.3	4.7
2	5.2	5.1	4.3	6.3	3.4	3.8	4.4	18	231	24	5.8	3.9
3	6.9	4.5	4.4	6.6	3.5	3.7	4.2	19	207	22	5.3	3.5
4	7.9	4.2	4.2	6.6	3.5	3.4	4.7	20	187	19	4.9	3.3
5	7.4	4.1	4.5	6.7	3.5	3.2	5.4	22	231	17	5.1	3.2
6	6.7	4.1	5.0	6.7	3.6	3.8	5.8	24	337	15	6.3	3.1
7	6.1	4.0	4.9	6.6	3.7	4.2	6.3	28	398	13	5.1	3.0
8	5.9	7.8	4.8	6.5	3.6	3.9	7.6	31	285	13	4.4	3.1
9	6.1	5.7	4.9	6.3	3.7	3.8	8.0	49	210	17	4.0	3.1
10	7.2	5.4	4.9	6.1	3.8	3.8	9.4	90	200	39	3.9	3.0
11	9.3	5.3	5.0	6.2	3.6	3.8	9.2	171	202	14	3.7	3.1
12	8.5	5.1	5.0	5.9	3.5	3.5	8.9	300	170	11	3.7	4.7
13	8.6	5.1	4.9	5.7	3.5	4.0	6.3	398	152	11	3.7	5.3
14	11	4.8	5.2	5.4	3.5	4.0	7.6	440	150	11	3.7	3.6
15	9.9	4.5	5.2	5.3	3.3	4.0	8.6	509	142	9.5	4.2	3.5
16	8.0	4.5	5.2	5.0	3.3	3.5	11	498	136	8.2	4.7	5.1
17	7.5	4.4	5.4	5.0	3.5	4.4	16	424	116	7.2	4.2	4.3
18	8.3	4.4	5.2	4.7	3.4	3.8	23	327	98	6.8	3.9	3.6
19	8.2	4.4	5.6	4.6	3.2	3.7	24	321	86	6.3	3.9	3.5
20	6.8	4.3	5.3	4.6	3.1	4.4	27	410	82	5.8	10	3.8
21	6.6	4.1	5.8	4.4	3.5	5.5	30	417	76	5.6	6.5	5.2
22	6.1	4.3	6.2	4.4	3.6	4.8	28	431	66	5.4	5.4	5.2
23	5.9	4.3	6.1	4.3	3.6	4.9	25	463	59	5.8	4.7	4.4
24	5.8	4.5	5.9	4.0	3.6	4.8	28	768	52	5.8	8.2	3.9
25	5.2	4.2	6.0	3.9	3.7	4.4	30	590	48	8.5	6.5	4.5
26	5.2	4.1	6.2	3.8	3.6	5.0	26	470	44	15	5.1	4.7
27	5.1	4.1	6.3	3.6	3.5	4.0	28	402	40	9.8	4.2	4.4
28	4.5	4.4	6.2	3.5	3.6	4.2	28	330	36	6.8	3.9	4.1
29	4.7	4.2	6.2	3.4	3.8	4.7	17	316	33	6.0	3.7	4.1
30	4.5	4.2	6.4	3.3	---	4.1	17	299	31	14	3.5	4.4
31	4.8	---	6.3	3.3	---	4.0	---	279	---	8.2	3.3	---
TOTAL	207.5	139.5	165.7	158.9	102.0	126.9	458.6	8881	4507	389.7	151.8	119.3
MEAN	6.69	4.65	5.35	5.13	3.52	4.09	15.3	286	150	12.6	4.90	3.98
MAX	11	7.8	6.4	6.7	3.8	5.5	30	768	402	39	10	5.3
MIN	3.6	4.0	4.2	3.3	3.1	3.2	4.2	17	31	5.4	3.3	3.0
AC-FT	412	277	329	315	202	252	910	17620	8940	773	301	237

CAL YR 1983 TOTAL 11227.7 MEAN 30.8 MAX 448 MIN 2.1 AC-FT 22270
WTR YR 1984 TOTAL 15407.9 MEAN 42.1 MAX 768 MIN 3.0 AC-FT 30560

09302450 LOST CREEK NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1984, (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL 18...	0845	7.0	288	7.7	10.5	8.0	150	45	9.1	4.9

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
JUL 18...	.2	1.2	124	33	.80	.10	12	180	.25	3.4

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
JUL 18...	<.010	<.10	.090	.11	.20	.010	.010	10	360

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JAN 05...	1100	6.7	350	.0	MAY 07...	1050	26	310	2.0
FEB 01...	1135	3.4	360	1.0	16...	2015	605	140	2.5
MAR 07...	1120	4.0	350	1.0	JUL 10...	1130	27	200	13.0
APR 10...	1100	8.4	310	2.0	AUG 07...	1120	5.2	330	16.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JUL 18...	0845	7.0	9	.17

09302500 MARVINE CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°02'18", long 107°29'15", in NE¼SE¼ sec.21, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 166 ft upstream from county road bridge, 1,800 ft upstream from mouth, and 8 mi northeast of Buford.

DRAINAGE AREA.--59.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to September 1984 (discontinued).

REVISED RECORDS.--WSP 1313: 1905-6. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft, from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum. Sept. 1, 1972, to Sept. 30, 1973, at site 40 ft downstream at datum 1.69 ft, higher. Oct. 1, 1973, to Sept. 30, 1975, at site 126 ft downstream at datum 5.0 ft, higher.

REMARKS.--Records good. Diversions above station for irrigation of 310 acres of hay meadows. One small transbasin diversion above station to Ute Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 93.2 ft^3/s; 67,520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 723 ft^3/s, June 17, 1905, gage height, 3.50 ft, datum then in use; maximum gage height recorded, 5.39 ft, Dec. 17, 1972, site then in use (backwater from ice); minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 410 ft^3/s at 0100 June 30, gage height, 4.13 ft, only peak above base of 300 ft^3/s; minimum daily, 55 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	90	82	72	57	60	62	69	332	358	178	144
2	101	89	83	72	55	60	61	69	307	346	173	127
3	101	89	81	74	62	60	61	69	304	331	168	122
4	112	88	82	70	57	59	63	71	294	310	167	120
5	100	88	81	70	59	65	62	70	299	282	177	118
6	98	88	80	68	64	68	63	70	320	259	174	116
7	97	88	80	68	61	64	63	74	312	248	168	116
8	97	94	80	67	61	61	65	73	287	245	162	114
9	97	89	79	67	67	60	64	81	266	288	158	112
10	97	87	79	77	60	59	64	95	266	275	156	110
11	99	87	79	68	60	59	62	113	266	234	153	109
12	97	87	79	68	63	59	63	129	264	217	151	110
13	95	87	79	73	60	59	61	141	280	214	147	108
14	100	87	80	65	60	60	61	170	292	212	145	106
15	98	85	79	66	61	61	63	199	306	201	146	113
16	96	86	77	66	65	61	66	214	306	190	144	126
17	96	86	77	66	61	61	72	216	300	181	142	116
18	97	87	77	66	61	63	74	196	295	177	141	112
19	96	86	77	66	63	61	73	196	297	172	141	110
20	95	86	77	66	68	61	69	214	306	169	173	109
21	94	87	77	66	78	61	67	236	316	166	151	112
22	93	86	77	66	61	62	67	254	320	165	144	112
23	92	85	77	66	61	62	71	272	323	184	140	108
24	92	84	76	65	62	61	72	296	330	198	146	111
25	92	85	76	64	60	62	71	291	319	207	139	113
26	91	84	76	63	60	61	69	281	321	188	134	111
27	91	84	76	62	66	61	68	274	338	179	132	109
28	91	88	76	61	73	60	67	267	362	184	130	110
29	91	84	76	60	62	61	67	279	380	179	126	109
30	89	83	77	59	---	62	67	282	370	197	124	112
31	90	---	72	58	---	61	---	319	---	184	123	---
TOTAL	2979	2604	2424	2065	1808	1895	1978	5580	9278	6940	4653	3425
MEAN	96.1	86.8	78.2	66.6	62.3	61.1	65.9	180	309	224	150	114
MAX	112	94	83	77	78	68	74	319	380	358	178	144
MIN	89	83	72	58	55	59	61	69	264	165	123	106
AC-FT	5910	5170	4810	4100	3590	3760	3920	11070	18400	13770	9230	6790

CAL YR 1983	TOTAL	40543	MEAN	111	MAX	365	MIN	51	AC-FT	80420
WTR YR 1984	TOTAL	45629	MEAN	125	MAX	380	MIN	55	AC-FT	90510

09302500 MARVINE CREEK NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1984, discontinued.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL 18...	0920	177	205	7.8	8.5	8.6	110	32	7.3	2.5

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
JUL 18...	.1	.90	77	30	.30	.10	18	140	.19	66

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
JUL 18...	<.010	.11	.090	.31	.40	.020	.020	<10	270

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
NOV 28...	1230	83	260	2.0	APR 10...	1140	62	280	4.0
JAN 05...	1300	70	230	2.5	MAY 07...	1200	70	300	4.5
FEB 01...	1300	81	250	.5	JUL 10...	1245	264	195	13.0
MAR 07...	1245	61	260	.5	SEP 12...	1200	108	260	9.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JUL 18...	0920	177	15	7.2

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft east of Buford and 1.2 mi upstream from South Fork White River.

DRAINAGE AREA.--260 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft, from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum. Several observations of specific-conductance and water temperature were obtained, and are published elsewhere in this report.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 900 acres above and 300 acres below station.

AVERAGE DISCHARGE.--39 years (water years 1911-15, 1920, 1952-84), 315 ft³/s; 228,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,550 ft³/s, May 24, 1984, gage height 6.76 ft; maximum gage height, 7.22 ft, Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s, Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 16	2200	2,900	6.48	June 1	1200	2,850	6.48
May 24	0100	*3,550	6.76				

Minimum daily discharge, 155 ft³/s, Feb. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	229	219	196	181	169	171	230	2500	1310	603	380
2	261	224	218	203	169	168	169	240	1870	1270	576	370
3	273	219	205	226	185	169	166	260	1810	1230	548	360
4	294	218	214	205	186	175	173	280	1780	1170	529	350
5	267	217	210	201	174	161	186	290	1790	1120	544	340
6	260	215	215	192	183	207	186	290	1810	1030	565	330
7	251	213	216	190	176	222	190	296	1840	971	512	330
8	247	250	210	186	158	175	210	294	1670	944	450	350
9	244	223	205	185	178	170	193	386	1520	980	420	370
10	251	222	205	180	174	170	202	574	1400	1090	400	362
11	258	224	203	187	158	172	189	872	1510	928	380	333
12	250	223	207	184	171	169	182	1210	1590	859	380	348
13	247	223	208	184	164	172	186	1510	1490	841	380	361
14	270	226	211	183	167	176	192	1720	1620	840	380	335
15	260	213	211	180	155	174	227	2110	1610	783	420	347
16	251	216	203	186	174	176	276	2400	1700	738	440	416
17	249	216	207	182	163	176	319	2250	1650	689	430	373
18	257	226	201	171	161	178	400	1970	1610	654	420	351
19	254	218	204	173	160	171	420	1740	1570	623	420	346
20	245	221	201	202	170	176	500	2050	1600	601	500	348
21	243	224	197	237	174	185	560	2380	1630	584	470	370
22	241	219	200	236	162	175	520	2250	1670	583	450	376
23	239	222	199	209	171	178	460	2700	1560	590	430	351
24	239	222	198	187	169	180	520	3000	1500	671	480	353
25	233	224	217	196	165	175	560	2800	1480	696	450	371
26	229	225	232	184	163	175	500	2310	1400	686	420	365
27	228	225	234	188	169	172	520	2140	1350	619	390	359
28	223	242	212	191	170	169	520	2000	1330	588	380	351
29	225	219	203	183	171	172	300	1900	1320	562	370	348
30	222	216	229	177	---	174	230	1880	1350	624	360	362
31	226	---	220	185	---	171	---	1900	---	628	350	---
TOTAL	7689	6674	6514	5969	4921	5452	9427	46232	48530	25502	13847	10706
MEAN	248	222	210	193	170	176	314	1491	1618	823	447	357
MAX	294	250	234	237	186	222	560	3000	2500	1310	603	416
MIN	222	213	197	171	155	161	166	230	1320	562	350	330
AC-FT	15250	13240	12920	11840	9760	10810	18700	91700	96260	50580	27470	21240

CAL YR 1983 TOTAL 162273 MEAN 445 MAX 2190 MIN 153 AC-FT 321900
WTR YR 1984 TOTAL 191463 MEAN 523 MAX 3000 MIN 155 AC-FT 379800

NOTE.--NO GAGE-HEIGHT RECORD AUG. 8 TO SEPT. 9.

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUL 18...	1015	654	204	7.0	9.5	8.9	110	34	6.7	2.5

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
JUL 18...	.1	1.0	77	34	.30	<.10	17	140	.19

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
JUL 18...	251	<.010	<.10	.090	<.20	.010	.020	<10	310

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
NOV 28...	1400	212	280	1.0	APR 10...	1310	193	320	6.0
JAN 05...	1410	223	270	.0	MAY 07...	1325	265	340	6.5
FEB 03...	1100	135	330	.5	JUL 10...	1440	1060	195	14.5
MAR 07...	1405	227	310	3.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JUL 18...	1015	654	14	25

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft upstream from Forest Service trail bridge, 0.2 mi upstream from Wagonwheel Creek, and 0.3 mi northeast of Budge's Resort.

DRAINAGE AREA.--52.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft, from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft upstream at datum 1.3 ft, lower.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station.

AVERAGE DISCHARGE.--9 years, 108 ft³/s; 78,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,750 ft³/s, June 25, 1983, gage height, 6.57 ft, from rating curve extended above 850 ft³/s; minimum daily, 21 ft³/s, Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,370 ft³/s at 2200 June 21, gage height, 5.76 ft; minimum daily, 37 ft³/s, Mar. 11, 12, 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	55	53	60	59	46	39	47	875	677	142	152
2	60	54	58	58	58	42	39	48	683	636	131	133
3	63	56	53	58	57	41	39	47	648	532	126	121
4	63	53	53	58	56	40	45	47	560	432	121	116
5	63	52	53	58	56	48	43	44	507	359	137	113
6	61	52	53	58	59	58	42	44	430	308	146	108
7	56	52	53	58	59	55	42	45	377	278	124	107
8	55	60	53	58	57	47	42	47	322	260	116	105
9	54	56	55	59	55	42	42	57	282	265	114	101
10	56	56	57	58	54	38	42	75	271	369	114	100
11	58	55	54	58	49	37	42	105	288	224	109	100
12	58	53	50	58	49	37	45	133	324	198	108	99
13	57	53	50	59	49	39	41	154	426	190	109	98
14	63	53	50	60	44	38	44	193	575	216	119	97
15	63	58	54	60	43	38	45	236	788	187	125	96
16	60	59	56	60	47	38	47	263	939	165	126	131
17	61	54	60	60	46	40	51	280	785	153	114	110
18	64	54	62	60	42	37	56	268	713	145	114	99
19	62	53	62	60	41	37	55	265	760	137	118	94
20	61	53	62	60	49	40	53	313	901	133	179	93
21	60	53	62	60	61	41	51	370	1050	130	148	94
22	59	53	60	60	53	40	50	427	1070	133	138	101
23	59	53	60	60	48	43	49	539	971	134	128	92
24	58	53	60	60	48	41	50	626	928	160	139	103
25	56	53	60	60	49	40	51	724	825	179	135	105
26	55	53	58	60	49	41	51	699	707	161	127	97
27	55	53	62	60	51	41	50	685	764	149	120	92
28	54	53	62	60	54	41	53	622	831	143	117	88
29	54	53	60	60	50	41	48	674	889	138	116	85
30	54	53	60	60	---	40	47	745	751	173	112	89
31	54	---	60	60	---	39	---	734	---	170	112	---
TOTAL	1816	1621	1765	1838	1492	1286	1394	9556	20240	7534	3884	3119
MEAN	58.6	54.0	56.9	59.3	51.4	41.5	46.5	308	675	243	125	104
MAX	64	60	62	60	61	58	56	745	1070	677	179	152
MIN	54	52	50	58	41	37	39	44	271	130	108	85
AC-FT	3600	3220	3500	3650	2960	2550	2760	18950	40150	14940	7700	6190

CAL YR 1983 TOTAL 49916 MEAN 137 MAX 2020 MIN 30 AC-FT 99010
WTR YR 1984 TOTAL 55545 MEAN 152 MAX 1070 MIN 37 AC-FT 110200

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT,CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT										
06...	1140	63	145	8.3	6.5	10.0	75	20	6.0	1.8
SEP										
05...	1025	116	143	8.0	7.5	--	92	27	5.9	1.7

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT										
06...	.0	1.1	79	4.7	.40	<.10	16	98	.13	17
SEP										
05...	.0	1.0	76	4.2	.40	<.10	16	100	.14	32

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
OCT									
06...	<.020	<.10	.020	.38	.40	<.010	.010	<10	84
SEP									
05...	<.010	<.10	.030	.27	.30	<.010	.040	<10	86

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
SEP							
05...	<1	16	<1	10	<1	33	2

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
SEP							
05...	8	<.1	<1	<1	<1	<1	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
SEP				
05...	1025	116	7	2.2

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft upstream from mouth and confluence of South Fork White River, about 800 ft downstream from private road bridge, and 0.2 mi north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years, 10.1 ft^3/s; 7,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 320 ft^3/s (estimated), June 25, 1983. Maximum gage height determined, 4.48 ft, June 20, 1984; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 240 ft^3/s (estimated), June 22, only peak above base of 55 ft^3/s; no flow most days during winter period.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.10	.00	.00	.00	.00	.00	.00	85	74	6.5	5.9
2	.14	.10	.00	.00	.00	.00	.00	.00	80	67	5.5	5.9
3	.14	.11	.00	.00	.00	.00	.00	.00	78	61	5.2	5.8
4	.14	.00	.00	.00	.00	.00	.00	.00	77	53	5.0	5.8
5	.14	.00	.00	.00	.00	.00	.00	.00	75	45	5.0	6.0
6	.44	.00	.00	.00	.00	.00	.00	.00	70	40	5.1	5.3
7	.41	.00	.00	.00	.00	.00	.00	.00	67	35	5.1	5.3
8	.41	.00	.00	.00	.00	.00	.00	.00	65	34	5.1	5.2
9	.40	.00	.00	.00	.00	.00	.00	.00	60	34	5.2	4.9
10	.40	.00	.00	.00	.00	.00	.00	.00	58	34	5.2	4.6
11	.40	.00	.00	.00	.00	.00	.00	.00	60	32	5.1	5.1
12	.40	.00	.00	.00	.00	.00	.00	.00	65	31	5.0	5.2
13	.39	.00	.00	.00	.00	.00	.00	.45	90	30	5.1	4.4
14	.36	.00	.00	.00	.00	.00	.00	1.3	127	29	5.1	4.1
15	.36	.00	.00	.00	.00	.00	.00	2.1	181	25	5.1	4.0
16	.28	.00	.00	.00	.00	.00	.00	2.4	206	18	5.2	6.6
17	.21	.00	.00	.00	.00	.00	.00	3.2	173	16	5.2	4.7
18	.20	.00	.00	.00	.00	.00	.00	13	155	14	5.2	4.0
19	.20	.00	.00	.00	.00	.00	.00	23	159	14	5.3	3.7
20	.16	.00	.00	.00	.00	.00	.00	24	199	12	5.5	3.6
21	.11	.00	.00	.00	.00	.00	.00	25	230	10	5.6	4.3
22	.11	.00	.00	.00	.00	.00	.00	29	240	10	5.5	5.6
23	.11	.00	.00	.00	.00	.00	.00	38	230	10	5.4	4.1
24	.11	.00	.00	.00	.00	.00	.00	68	217	10	5.4	5.7
25	.11	.00	.00	.00	.00	.00	.00	78	206	9.7	5.5	5.4
26	.10	.00	.00	.00	.00	.00	.00	74	200	9.8	5.5	4.9
27	.10	.00	.00	.00	.00	.00	.00	70	197	9.5	5.5	4.7
28	.10	.00	.00	.00	.00	.00	.00	68	197	6.9	5.6	4.6
29	.10	.00	.00	.00	.00	.00	.00	60	195	5.9	5.6	4.4
30	.10	.00	.00	.00	---	.00	.00	65	178	5.2	5.6	4.4
31	.10	---	.00	.00	---	.00	---	70	---	7.2	5.7	---
TOTAL	6.87	.31	.00	.00	.00	.00	.00	714.45	4220	792.2	165.6	148.2
MEAN	.22	.01	.00	.00	.00	.00	.00	23.0	141	25.6	5.34	4.94
MAX	.44	.11	.00	.00	.00	.00	.00	78	240	74	6.5	6.6
MIN	.10	.00	.00	.00	.00	.00	.00	.00	58	5.2	5.0	3.6
AC-FT	14	.6	.00	.00	.00	.00	.00	1420	8370	1570	328	294

CAL YR 1983 TOTAL 7014.41 MEAN 19.2 MAX 320 MIN .00 AC-FT 13910
WTR YR 1984 TOTAL 6047.63 MEAN 16.5 MAX 240 MIN .00 AC-FT 12000

09303320 WAGONWHEEL CREEK AT BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 03...	1115	.10	280	8.2	3.0	10.2	.67	160	42	14
SEP 05...	1200	5.9	287	8.4	--	--	--	170	45	13

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV 03...	.80	.0	.60	150	3.1	.60	<.10	2.9	150	.21
SEP 05...	.50	.0	.60	165	2.1	.40	<.10	2.7	160	.22

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV 03...	.04	<.020	.27	.070	.33	.40	.010	.010	<10	33
SEP 05...	2.6	<.010	<.10	.020	.28	.30	<.010	.030	<10	32

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV 03...	<1	44	<1	<10	2	6	<1
SEP 05...	<1	47	<1	<10	1	<3	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 03...	3	<.1	<1	4	<1	<1	3
SEP 05...	3	<.1	<1	<1	<1	<1	<3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT 06...	1215	.42	270	5.5

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft upstream from South Fork Campground, 10 mi above mouth, and about 10.5 mi southeast of Buford.

DRAINAGE AREA.--128 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1976 to current year.

REVISED RECORDS.--WDR CO-79-3: 1976(M), 1977, 78(P), 1978.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. No regulation or diversions above station.

AVERAGE DISCHARGE.--8 years, 208 ft³/s; 150,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft³/s, June 22, 1983, gage height, 6.18 ft; minimum daily, 40 ft³/s, Feb. 1 to Mar. 10, 1980, Dec. 30, 1980, Jan. 10, 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 1	2100	2,170	5.31	June 22	0100	*3,750	5.95

Minimum daily discharge, 60 ft³/s Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	95	89	107	92	84	74	98	1970	1250	293	238
2	110	94	104	105	83	82	76	100	1470	1130	270	212
3	117	92	85	105	85	80	78	101	1330	975	255	189
4	118	90	102	105	84	76	78	98	1370	855	242	176
5	115	91	102	105	81	74	77	99	1220	893	243	168
6	113	90	90	105	76	70	80	101	1010	860	273	161
7	111	88	90	105	74	72	76	100	884	818	232	158
8	107	103	90	96	73	74	78	105	641	787	215	154
9	105	95	90	93	76	72	85	112	580	799	211	150
10	104	92	90	81	83	70	81	149	562	908	209	145
11	107	92	91	97	86	73	84	217	581	729	197	147
12	106	91	85	90	87	72	85	287	624	556	194	152
13	102	92	84	83	86	71	81	323	816	456	189	148
14	114	92	84	85	78	71	81	394	1200	516	192	140
15	112	94	89	86	72	71	83	472	1750	439	206	137
16	107	105	96	88	80	72	91	535	2190	429	208	190
17	108	91	101	84	78	74	102	566	1610	400	187	172
18	112	92	105	83	69	74	119	592	1460	370	185	148
19	110	92	105	79	60	72	122	546	1590	350	202	140
20	105	91	105	84	61	75	115	665	2010	340	285	138
21	105	90	105	88	80	76	106	791	2490	340	263	147
22	103	89	104	90	80	77	100	794	2510	340	235	170
23	102	89	104	94	72	77	104	1090	1940	330	209	151
24	100	89	104	96	84	76	110	1350	1750	350	221	167
25	98	89	102	100	82	77	116	1570	1600	377	221	178
26	98	90	111	100	80	77	111	1440	1380	351	205	165
27	97	87	112	100	72	75	110	1380	1390	326	193	157
28	95	83	110	99	76	76	105	1250	1480	311	187	150
29	96	85	110	98	80	74	100	1200	1490	289	182	146
30	94	86	109	94	---	74	98	1340	1420	323	172	151
31	93	---	110	88	---	74	---	1450	---	340	171	---
TOTAL	3273	2739	3058	2913	2270	2312	2806	19315	42318	17537	6747	4845
MEAN	106	91.3	98.6	94.0	78.3	74.6	93.5	623	1411	566	218	162
MAX	118	105	112	107	92	84	122	1570	2510	1250	293	238
MIN	93	83	84	79	60	70	74	98	562	289	171	137
AC-FT	6490	5430	6070	5780	4500	4590	5570	38310	83940	34780	13380	9610

CAL YR 1983 TOTAL 89952 MEAN 246 MAX 2500 MIN 52 AC-FT 178400
WTR YR 1984 TOTAL 110133 MEAN 301 MAX 2510 MIN 60 AC-FT 218400

09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
NOV										
29...	1230	85	210	8.2	.0	7.6	100	29	7.6	2.1
JUL										
24...	0930	350	167	7.9	8.0	8.8	96	27	6.8	1.7

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
NOV										
29...	.0	.80	102	6.2	.70	<.10	15	120	.17	28
JUL										
24...	.0	.90	87	5.5	.50	<.10	11	110	.14	100

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
NOV									
29...	<.010	<.10	.020	.48	.50	<.010	.030	<10	100
JUL									
24...	<.010	<.10	.050	.25	.30	.010	<.010	<10	90

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV							
29...	1	18	<1	<10	1	10	1

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
NOV							
29...	3	<.1	<1	6	<1	<1	8

09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT				
04...	1125	116	190	5.5
FEB				
04...	--	102	200	.5
APR				
06...	1135	78	190	4.0
MAY				
08...	--	94	200	3.5
21...	1135	774	109	5.5
JUL				
12...	--	502	170	11.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
24...	0930	350	12	11
SEP				
05...	1200	168	7	3.2

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft downstream from Peltier Creek, and 5.6 mi southeast of Buford.

DRAINAGE AREA.--152 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45, WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft, from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft upstream at different datums. Records for 1919-20 at site 6.0 mi downstream not equivalent.

REMARKS.--Records good. Diversions for irrigation of about 600 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1904-06, 1911-15, 1943-47, 1968-84), 266 ft^3/s; 192,700 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,620 ft^3/s, June 24, 1983, gage height, 7.73 ft; maximum gage height 8.2 ft, June 17, 1906, site and datum then in use; minimum discharge recorded, 56 ft^3/s, Dec. 18, 1946, gage height, 1.01 ft, site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	0300	2,200	6.35	June 22	0300	*2,440	6.57

Minimum daily discharge, 101 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	141	139	134	143	165	120	145	2170	1380	350	299
2	149	141	154	134	148	156	119	147	1960	1310	327	269
3	159	140	135	134	149	145	119	147	1870	1220	312	242
4	151	139	163	134	154	130	120	149	1770	1090	300	229
5	149	138	161	134	152	125	117	151	1710	969	295	221
6	146	138	128	134	149	120	116	152	1500	832	337	215
7	144	137	128	134	148	123	118	153	1450	780	297	210
8	143	151	129	134	148	126	119	180	1230	735	280	208
9	142	154	127	134	144	122	124	188	1070	727	277	203
10	142	149	127	134	144	120	127	225	963	868	272	198
11	144	150	121	134	143	122	128	310	997	640	261	198
12	138	152	128	134	140	129	127	419	1140	568	256	207
13	136	156	135	131	140	144	127	476	1330	534	250	200
14	145	157	133	130	140	164	126	589	1650	574	251	191
15	149	157	137	127	137	165	128	787	2000	512	263	188
16	142	160	147	121	134	156	130	901	2240	474	268	237
17	141	152	144	111	136	154	133	961	2040	432	247	220
18	144	154	143	106	133	150	136	986	1880	409	244	195
19	145	150	143	101	130	152	137	903	1900	390	260	188
20	142	142	142	104	147	147	138	1040	2040	375	363	185
21	142	145	136	109	148	142	138	1200	2200	359	332	190
22	141	137	119	115	146	140	138	1270	2190	361	297	209
23	141	139	131	122	140	140	139	1470	2010	349	268	192
24	142	139	133	127	146	139	141	1730	1880	392	278	201
25	142	139	129	131	141	138	143	1980	1790	433	277	213
26	140	141	138	136	131	142	142	1950	1570	401	261	202
27	139	137	139	136	126	138	143	1910	1590	372	245	192
28	139	133	137	137	134	138	143	1760	1600	358	238	188
29	139	135	137	139	150	129	144	1770	1570	338	236	184
30	138	136	136	138	---	122	145	1880	1530	377	225	190
31	140	---	137	140	---	121	---	1940	---	406	225	---
TOTAL	4443	4339	4236	3969	4121	4304	3925	27869	50840	18965	8592	6264
MEAN	143	145	137	128	142	139	131	899	1695	612	277	209
MAX	159	160	163	140	154	165	145	1980	2240	1380	363	299
MIN	136	133	119	101	126	120	116	145	963	338	225	184
AC-FT	8810	8610	8400	7870	8170	8540	7790	55280	100800	37620	17040	12420

CAL YR 1983 TOTAL 130960 MEAN 359 MAX 3300 MIN 90 AC-FT 259800
WTR YR 1984 TOTAL 141867 MEAN 388 MAX 2240 MIN 101 AC-FT 281400

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
NOV 29...	1305	133	232	8.0	.0	--	.72	120	34	8.3
JUL 24...	1030	396	185	8.0	11.0	9.2	--	110	32	7.4

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
NOV 29...	2.2	.0	.90	109	13	.80	<.10	15	140	.19
JUL 24...	1.7	.0	.90	97	12	.30	<.10	13	130	.17

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
NOV 29...	50	<.010	.12	.030	.57	.60	.010	.040	<10	170
JUL 24...	134	<.010	.30	<.010	--	--	.010	.040	<10	130

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV 29...	1	20	<1	<10	1	16	<1

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 29...	10	<.1	<1	5	<1	1	<3

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT 04...	1010	153	220	5.0	FEB 04...	1240	156	210	.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JUL 24...	1030	396	6	6.4

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from highway bridge, 0.8 mi upstream from mouth, and 1.0 mi south of Buford.

DRAINAGE AREA.--177 mi^2.

PERIOD OF RECORD.--Streamflow records, July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year. Water-quality data available, October 1976 to February 1978. Sediment data available, October 1976 to February 1978.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft, from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 200 ft downstream, at different datum. Oct. 1951 to Apr. 1981, at site 500 ft downstream, at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 1,100 acres above station and a small area below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 258 ft^3/s; 186,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,150 ft^3/s, June 26, 1983; gage height, 6.27 ft; maximum gage height, 7.07 ft, June 30, 1957, site and datum then in use, minimum daily discharge, 47 ft^3/s, Jan. 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 1	1600	1,920	5.24	June 16	0900	*2,560	6.45

Minimum daily discharge, 108 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	147	149	145	154	163	125	158	1970	1200	283	266
2	155	145	144	145	156	154	123	165	1710	1100	262	251
3	163	149	148	145	154	151	124	160	1590	950	252	226
4	169	143	144	145	160	142	124	156	1480	802	244	219
5	155	143	144	145	158	148	131	158	1390	706	239	215
6	152	142	145	145	158	150	134	154	1140	630	270	210
7	151	141	145	145	154	153	135	163	1100	570	244	208
8	151	155	148	145	154	156	139	156	868	545	232	206
9	149	144	147	145	154	143	148	172	701	545	230	204
10	151	143	148	145	152	139	145	199	595	639	229	202
11	156	145	145	145	151	136	148	253	591	499	223	203
12	154	144	145	145	148	134	142	300	655	435	218	208
13	152	143	143	150	147	132	144	393	953	415	216	207
14	163	144	144	140	147	134	139	473	1090	439	220	201
15	162	142	147	132	147	134	143	634	1470	399	232	202
16	155	143	154	131	140	135	150	747	2270	371	238	231
17	155	144	152	124	148	131	161	813	1850	350	227	226
18	158	147	150	114	144	134	180	848	1700	337	225	208
19	158	141	148	108	140	131	187	767	1700	321	234	204
20	153	140	147	112	150	127	184	893	1800	308	303	204
21	152	144	146	118	150	130	175	1070	1900	298	291	209
22	151	140	147	124	152	132	171	1140	1900	298	264	220
23	152	138	147	132	148	127	177	1360	1800	286	238	212
24	150	138	148	138	152	127	187	1640	1700	327	248	216
25	154	144	148	140	150	129	194	1910	1600	356	248	227
26	151	149	148	142	142	123	182	1810	1400	327	236	220
27	149	147	145	143	138	124	172	1730	1400	308	227	217
28	148	148	145	143	142	119	165	1570	1400	280	222	213
29	146	150	145	148	155	119	165	1490	1400	255	222	210
30	145	150	145	142	---	131	160	1600	1300	286	215	219
31	146	---	145	148	---	125	---	1690	---	317	213	---
TOTAL	4766	4333	4546	4269	4345	4213	4654	24772	42423	14899	7445	6464
MEAN	154	144	147	138	150	136	155	799	1414	481	240	215
MAX	169	155	154	150	160	163	194	1910	2270	1200	303	266
MIN	145	138	143	108	138	119	123	154	591	255	213	201
AC-FT	9450	8590	9020	8470	8620	8360	9230	49140	84150	29550	14770	12820

CAL YR 1983	TOTAL	127375	MEAN	349	MAX	2970	MIN	100	AC-FT	252600
WTR YR 1984	TOTAL	127129	MEAN	347	MAX	2270	MIN	108	AC-FT	252200

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.0 mi southeast of Meeker.

DRAINAGE AREA.--648 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft, from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft upstream at datum 2.00 ft, higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 8,000 acres above station and about 4,000 acres below.

AVERAGE DISCHARGE.--23 years, 569 ft^3/s; 412,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,740 ft^3/s, June 26, 1983, gage height, 7.07 ft; minimum daily, 6.5 ft^3/s, July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,700 ft^3/s at 0600 May 25, gage height, 7.05 ft, only peak above base of 2,000 ft^3/s; minimum daily, 250 ft^3/s, Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	404	436	360	340	290	350	509	4860	2730	1120	642
2	366	408	436	340	340	300	350	508	4400	2540	1120	616
3	422	432	422	370	330	300	340	485	4070	2420	1110	570
4	492	443	432	400	330	270	340	495	3900	2230	1110	549
5	471	439	408	370	330	250	370	520	3810	2050	1110	531
6	460	436	380	360	320	270	440	539	3590	1840	996	518
7	443	432	411	360	320	290	460	394	4140	1660	838	513
8	432	492	422	360	320	298	480	544	3720	1570	820	512
9	425	457	418	370	320	296	500	685	3230	1570	775	504
10	425	443	415	340	320	295	460	1000	2880	1780	753	488
11	457	453	411	370	320	293	480	1710	2970	1500	746	490
12	450	450	411	380	320	292	430	1950	3030	1390	729	506
13	439	450	411	360	320	290	430	2260	3040	1270	678	515
14	453	453	411	380	320	289	420	2550	3370	1310	645	496
15	471	411	415	380	320	287	440	3100	3780	1200	631	495
16	446	436	404	310	320	292	450	3590	4120	1140	677	557
17	446	439	408	350	320	330	461	3480	3970	1060	620	559
18	446	453	401	340	320	343	561	3380	3690	1000	622	518
19	464	439	408	340	320	329	591	3000	3520	959	668	513
20	450	439	387	340	280	319	535	3390	3600	914	828	511
21	446	450	380	340	310	327	500	3870	3740	900	798	524
22	439	436	369	340	320	345	470	3900	3770	874	695	550
23	432	404	369	340	290	329	470	4340	3550	872	635	545
24	436	429	369	340	290	323	560	4920	3370	953	655	551
25	439	464	383	340	300	328	520	5260	3300	1080	667	613
26	432	457	457	340	280	324	500	4680	2950	1080	630	611
27	425	446	467	340	270	330	480	4560	2870	1140	601	601
28	418	436	380	340	290	320	470	4170	2860	1130	583	588
29	411	439	330	340	290	330	460	3920	2830	1130	570	598
30	408	429	360	340	---	350	464	4020	2850	1130	556	624
31	404	---	390	340	---	330	---	4080	---	1120	547	---
TOTAL	13535	13199	12501	10920	9070	9559	13782	81809	105780	43542	23533	16408
MEAN	437	440	403	352	313	308	459	2639	3526	1405	759	547
MAX	492	492	467	400	340	350	591	5260	4860	2730	1120	642
MIN	366	404	330	310	270	250	340	394	2830	872	547	488
AC-FT	26850	26180	24800	21660	17990	18960	27340	162300	209800	86370	46680	32550

CAL YR 1983 TOTAL 289165 MEAN 792 MAX 5360 MIN 216 AC-FT 573600
WTR YR 1984 TOTAL 353638 MEAN 966 MAX 5260 MIN 250 AC-FT 701400

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1984, (discontinued).
WATER TEMPERATURES: July 1978 to September 1984, (discontinued).

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1984.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Dissolved solids were calculated without using the silica constituent.

COOPERATION.--Chemical quality data are furnished by the U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 511 micromhos Dec. 24, 1981; minimum 152 micromhos June 14,1980.
WATER TEMPERATURES: Maximum, [illegible].0°C July 8, 1981; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, [illegible]0 micromhos Oct. 31, Feb. 20; minimum, 167 micromhos June 22.
WATER TEMPERATURES: Maximum, [illegible]°C July 21, Aug. 14; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT									
06...	1630	460	355	8.6	11.0	190	56	11	2.3
15...	1315	471	345	8.6	6.0	180	54	9.8	3.2
20...	1350	450	351	8.5	5.5	180	55	9.8	1.1
27...	1205	425	356	8.7	5.0	190	56	11	2.3
NOV									
03...	1105	432	358	8.5	5.5	190	56	11	4.4
10...	1215	443	340	8.6	3.0	190	56	11	1.1
16...	1415	436	372	8.6	3.0	190	58	11	4.4
21...	1430	450	349	8.9	2.5	180	55	11	2.3
30...	1515	429	353	8.8	.5	190	56	11	2.3
DEC									
07...	1515	411	361	8.6	.5	190	57	11	2.3
14...	1425	411	360	8.6	.0	190	57	11	2.3
21...	1440	E380	387	8.8	.0	200	63	11	2.3
28...	1510	E380	365	8.6	.5	180	56	9.8	12
JAN									
04...	1410	E400	372	8.6	.0	170	53	9.8	12
12...	1045	E380	385	8.6	.0	190	58	11	1.1
23...	1100	E340	377	8.4	.0	190	57	11	4.4
30...	1125	E340	405	8.7	.0	200	62	12	3.2
FEB									
08...	1425	E320	385	8.7	2.0	200	60	11	4.4
16...	1045	E320	408	8.4	.0	210	64	12	3.2
23...	1120	E290	394	8.7	.5	200	61	11	4.4
29...	1440	291	439	8.7	3.0	210	63	12	3.2
MAR									
08...	1345	E298	398	8.5	3.5	210	63	12	4.4
13...	1510	E290	380	8.8	6.5	200	60	11	3.4
21...	1110	E327	376	8.7	4.5	190	59	10	3.7
29...	1355	E330	389	8.7	6.5	200	60	11	3.7
APR									
04...	1450	E340	400	8.9	8.0	200	61	11	3.7
12...	1405	E430	399	8.6	5.5	200	61	11	3.9
19...	0940	E591	348	8.3	6.0	170	53	9.8	2.3
26...	1510	E500	368	8.7	6.0	190	57	11	2.3
MAY									
04...	0925	495	400	8.5	5.0	200	61	11	3.2
10...	1040	966	335	8.3	7.0	160	50	9.6	3.2
17...	1130	3480	233	9.1	5.5	110	34	6.6	2.1
24...	1000	5010	204	7.9	11.5	98	30	5.6	1.6
31...	1050	4150	193	8.3	6.5	100	31	5.9	1.8
JUN									
07...	1020	4310	184	8.1	4.5	110	32	6.2	1.8
13...	1015	3130	230	8.0	8.5	110	34	6.9	2.1
21...	0925	3740	199	8.1	8.0	94	28	5.8	1.6
28...	1115	2860	193	8.4	9.5	97	29	6.0	1.8
JUL									
03...	1115	2420	204	8.4	11.0	98	29	6.1	2.1
11...	1515	1190	263	8.4	14.5	120	37	7.5	2.5
19...	1005	959	294	8.3	12.5	150	44	8.6	2.8
26...	1045	1080	250	8.3	12.5	140	43	8.5	2.8
AUG									
02...	1040	1120	302	8.4	12.0	140	40	8.6	3.0
09...	1000	[illegible]	310	8.2	12.0	150	45	8.9	2.8
16...	1130	[illegible]	313	8.7	14.5	150	46	9.4	3.0
24...	1130	[illegible]	315	8.5	12.5	150	47	9.1	3.4
30...	1130	[illegible]	342	8.6	12.5	160	50	9.6	3.2
SEP									
04...	1150	[illegible]	331	8.6	11.5	160	50	9.6	3.0
17...	0940	559	310	8.2	9.5	160	49	9.6	3.4
21...	1230	524	340	8.7	13.0	170	52	9.8	3.4
26...	1445	611	345	8.6	8.0	170	52	10	3.2

E ESTIMATED.

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE, FET-LAB (MG/L AS HCO3)	CAR- BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT									
06...	.0	.80	120		76	1.4	220	.30	273
15...	.1	1.2	120		79	1.4	220	.30	280
20...	.0	.80	120	10	79	1.4	210	.29	255
27...	.0	1.2	120		78	1.4	210	.29	241
NOV									
03...	.1	4.3	120	10	76	1.1	220	.30	257
10...	.0	1.2	120		79	1.4	220	.30	263
16...	.1	1.6	110	12	89	1.8	230	.31	271
21...	.0	2.3	120		82	1.8	220	.30	267
30...	.0	1.2	120		86	1.8	230	.31	266
DEC									
07...	.0	1.6	120		86	1.4	220	.30	244
14...	.0	1.2	93	19	88	1.8	230	.31	255
21...	.0	2.7	120		98	1.8	250	.34	--
28...	.4	.80	120		89	1.8	240	.33	--
JAN									
04...	.4	.80	120	11	83	1.4	230	.31	--
12...	.0	2.3	140	.000	91	1.8	230	.31	--
23...	.1	1.2	140	.000	83	1.4	220	.30	--
30...	.1	.80	140	.000	91	1.4	240	.33	--
FEB									
08...	.1	.80	120		87	1.4	230	.31	--
16...	.1	.80	120		94	2.5	240	.33	--
23...	.1	.80	120		97	1.8	240	.33	--
29...	.1	.80	110	13	95	1.8	240	.33	189
MAR									
08...	.1	.80	120		93	1.8	240	.33	--
13...	.1	2.0	130		91	3.2	240	.33	--
21...	.1	1.6	120		87	1.8	230	.31	--
29...	.1	1.2	110		90	1.8	230	.31	--
APR									
04...	.1	.80	120		96	1.8	240	.33	--
12...	.1	1.2	120		91	2.1	240	.33	--
19...	.0	1.2	130	.000	74	1.1	210	.29	--
26...	.0	.80	120		80	1.4	220	.30	--
MAY									
04...	.1	1.2	140	.000	84	1.4	230	.31	307
10...	.1	1.2	140	.000	63	1.4	200	.27	522
17...	.0	1.2	110	.000	27	1.1	130	.18	1220
24...	.0	.80	100	.000	19	.70	110	.15	1490
31...	.0	.80	100	.000	19	.70	110	.15	1230
JUN									
07...	.0	.80	100	.000	19	.70	110	.15	1280
13...	.0	.80	110	.000	24	1.8	120	.16	1010
21...	.0	.80	99	.000	18	.70	100	.14	1010
28...	.0	.80	98	.000	22	.70	110	.15	849
JUL									
03...	.0	.80	95	.000	24	1.1	110	.15	719
11...	.1	.80	110	.000	34	1.1	140	.19	450
19...	.1	.80	120	.000	48	1.4	170	.23	440
26...	.1	.80	120	.000	46	1.4	160	.22	467
AUG									
02...	.1	.80	130	.000	50	1.1	170	.23	514
09...	.1	.80	130	.000	54	1.4	170	.23	356
16...	.1	.80	120		57	1.4	180	.24	329
24...	.1	.80	130	.000	57	1.4	200	.27	354
30...	.1	.80	130	.000	63	1.4	210	.29	315
SEP									
04...	.1	.80	130		62	1.4	210	.29	311
17...	.1	.80	130	.000	62	1.4	210	.29	317
21...	.1	.80	130	.000	67	1.8	210	.29	297
26...	.1	.80	130		68	1.4	220	.30	363

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	388	400	353	367	396	378	---	391	192	---	285	318
2	389	400	348	391	394	376	---	389	200	---	294	314
3	382	369	352	384	403	374	---	393	203	205	301	329
4	376	353	349	357	404	384	---	386	203	197	303	333
5	374	378	353	359	402	399	388	380	---	210	307	334
6	374	---	370	367	404	394	---	381	215	---	294	334
7	381	---	363	369	401	383	---	384	198	---	299	335
8	373	---	354	373	386	386	---	379	183	---	305	334
9	364	---	351	374	386	375	---	364	192	---	309	334
10	359	359	355	390	381	376	---	326	227	221	309	335
11	364	350	358	386	380	377	---	286	225	250	310	335
12	373	---	363	379	399	377	400	258	226	262	310	328
13	370	---	362	386	385	381	388	251	225	266	314	325
14	363	---	361	375	384	388	395	244	215	269	317	330
15	357	---	352	382	392	391	397	232	207	280	319	332
16	364	369	356	401	397	406	383	229	201	283	316	322
17	369	358	355	402	375	401	373	219	205	291	320	324
18	374	347	354	410	389	390	358	196	205	296	323	340
19	348	347	357	418	402	394	331	218	205	293	316	343
20	352	356	377	407	423	396	---	---	200	294	304	343
21	350	353	397	403	419	386	---	---	186	292	300	340
22	361	354	385	393	396	368	---	---	174	292	310	340
23	374	366	366	384	388	369	---	---	181	293	322	343
24	367	365	371	384	374	369	---	189	186	280	316	344
25	371	347	353	381	371	363	---	---	187	274	312	334
26	375	339	330	380	376	367	369	---	195	282	317	341
27	368	355	341	384	392	374	376	---	194	291	325	344
28	375	351	367	387	383	386	383	---	194	297	327	341
29	388	344	395	397	377	388	383	---	---	299	327	343
30	388	341	372	398	---	385	388	---	---	294	332	350
31	408	---	351	397	---	---	---	203	---	279	334	---
MEAN	372	359	360	386	392	383	379	300	201	272	312	335

WTR YR 1984 MEAN 338 MAX 423 MIN 174

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	9.0	7.5	5.5	1.5	.5	.0	.0	.5	.0	4.0	.0
2	10.0	8.0	7.0	5.0	3.0	1.0	.0	.0	.5	.0	4.5	.5
3	8.0	6.0	7.0	4.5	2.5	.0	.0	.0	.5	.0	4.5	2.0
4	10.0	5.0	7.0	3.5	2.5	.0	.0	.0	1.0	.0	3.0	.5
5	10.5	6.0	6.5	4.0	.0	.0	.5	.0	1.0	.0	1.0	.5
6	11.0	7.0	7.0	4.0	.0	.0	.5	.0	1.0	.0	2.0	.0
7	9.5	7.0	7.0	4.0	.5	.0	.5	.0	1.0	.0	3.5	.5
8	10.5	6.5	7.0	3.5	2.0	.5	.5	.0	2.0	.0	4.5	.0
9	10.5	8.0	3.5	1.5	2.5	.5	1.0	.0	1.0	.0	4.5	.5
10	9.5	8.0	4.0	2.0	2.5	1.5	.0	.0	3.0	.0	6.5	1.0
11	9.0	7.0	5.0	3.0	2.5	1.0	.0	.0	1.0	.0	5.5	2.5
12	9.0	5.5	5.5	3.5	3.0	2.0	.0	.0	1.0	.0	4.5	1.0
13	9.0	5.5	6.0	4.0	1.5	.0	.0	.0	3.0	.0	6.0	.5
14	8.5	6.5	4.5	2.0	.5	.0	.5	.0	3.0	1.0	5.5	3.0
15	7.5	5.0	2.5	.5	1.0	.0	.0	.0	2.5	.0	6.5	1.5
16	7.0	4.0	3.0	.5	.0	.0	.0	.0	2.0	.0	5.5	3.5
17	7.5	4.0	4.5	1.5	1.5	.0	.0	.0	1.5	.0	5.5	1.0
18	8.5	6.5	4.0	2.5	1.0	.0	.0	.0	2.0	.0	4.0	1.0
19	7.5	4.5	3.0	1.0	1.5	.0	.0	.0	1.5	.0	6.0	.5
20	7.0	3.5	3.0	1.0	.5	.0	.0	.0	1.0	.0	6.5	1.0
21	8.0	4.0	2.5	1.0	.0	.0	.0	.0	1.0	.0	8.5	2.5
22	8.0	4.0	1.0	.0	.0	.0	.0	.0	2.5	.0	5.5	2.5
23	8.0	4.0	.0	.0	.0	.0	.0	.0	1.0	.0	6.5	1.5
24	6.5	4.5	.5	.0	.0	.0	.0	.0	2.0	.0	7.5	2.0
25	7.0	4.0	2.5	.5	.0	.0	.0	.0	1.5	.0	6.5	3.0
26	7.0	3.5	1.5	.0	.0	.0	.5	.0	3.0	.0	4.5	2.0
27	7.0	3.5	.0	.0	.0	.0	.0	.0	1.0	.0	6.0	2.0
28	6.5	3.5	.5	.0	.0	.0	.5	.0	1.5	.0	6.5	2.0
29	7.0	4.0	.5	.0	.0	.0	.5	.0	3.0	.0	6.0	2.5
30	7.0	4.5	.5	.0	.0	.0	.0	.0	---	---	5.5	3.0
31	7.5	5.5	---	---	.5	.0	.5	.0	---	---	---	---
MONTH	11.5	3.5	7.5	.0	3.0	.0	1.0	.0	3.0	.0	8.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	7.5	4.5	8.0	6.5	14.0	9.0	15.5	12.0	15.0	12.0
2	---	---	8.5	4.5	11.0	5.0	14.5	10.0	15.5	11.5	14.5	9.0
3	---	---	9.0	4.5	9.5	6.5	14.5	10.0	15.5	11.5	15.0	9.5
4	---	---	8.0	4.5	9.5	5.5	14.5	10.0	17.0	11.5	15.0	10.0
5	9.0	7.5	9.0	5.0	9.0	6.5	15.0	10.0	15.5	12.0	15.5	10.5
6	8.5	5.0	8.5	5.0	6.5	5.0	---	---	16.0	12.0	15.0	11.0
7	8.5	5.5	9.5	3.5	7.5	4.5	---	---	17.0	12.0	13.0	11.5
8	10.0	4.0	11.5	4.0	6.5	4.5	---	---	17.0	11.5	13.5	8.5
9	8.5	4.5	12.0	5.5	8.5	4.5	---	---	17.5	12.0	15.0	9.5
10	7.0	2.0	12.0	6.0	---	---	---	---	17.0	12.0	15.0	10.0
11	6.5	3.0	11.5	5.5	---	---	16.0	9.5	17.0	12.0	13.0	10.5
12	6.0	.5	10.0	5.0	---	---	16.0	10.5	16.0	12.5	13.5	10.0
13	8.5	3.0	9.0	4.0	12.5	8.0	15.0	12.5	17.0	12.5	14.5	11.0
14	8.5	3.0	10.5	4.5	12.5	7.5	15.0	12.0	18.0	13.5	15.0	10.5
15	9.5	3.5	9.0	4.5	11.5	8.5	15.5	12.0	16.5	13.0	13.5	10.5
16	11.0	4.5	9.5	5.0	10.0	7.5	16.5	11.0	16.0	13.0	12.5	10.5
17	11.5	5.0	10.0	3.5	11.5	7.0	16.5	11.0	17.5	12.5	14.0	9.0
18	11.0	6.5	8.0	4.5	10.5	7.0	17.0	11.5	16.0	13.5	14.5	10.0
19	9.0	6.0	10.5	4.5	11.5	7.0	17.0	12.0	16.5	12.5	13.5	10.5
20	6.0	4.0	10.5	5.0	12.0	8.0	17.0	12.5	15.5	12.0	14.0	9.5
21	7.5	2.5	9.0	5.0	12.0	7.5	18.0	12.5	14.0	11.0	13.5	11.0
22	8.5	2.5	11.0	5.0	12.0	7.5	17.0	13.5	14.5	11.0	12.0	9.0
23	10.0	4.5	11.5	5.0	12.5	7.5	17.5	12.5	14.0	11.5	13.5	9.0
24	8.5	5.5	9.5	5.5	13.0	8.0	17.0	12.5	15.0	12.0	11.5	9.0
25	7.5	3.0	10.0	5.5	12.0	8.5	17.0	12.5	14.0	11.0	9.5	6.0
26	6.0	1.5	11.0	5.0	13.0	8.0	15.5	12.5	16.0	10.5	8.5	6.0
27	7.5	1.5	10.5	5.5	13.5	8.5	15.0	11.5	16.0	11.0	11.5	7.0
28	5.5	1.5	10.5	5.0	14.0	9.0	16.0	12.0	16.0	11.5	10.0	7.0
29	8.0	2.5	11.5	5.5	14.0	9.5	16.0	11.5	16.5	11.5	8.5	5.0
30	7.5	4.0	10.5	6.0	13.0	9.5	16.0	12.5	16.5	11.0	9.0	4.5
31	---	---	9.5	6.5	---	---	16.0	11.5	17.0	12.0	---	---
MONTH	11.5	.5	12.0	3.5	14.0	4.5	18.0	9.0	18.0	10.5	15.5	4.5
YEAR	18.0	.0										

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat°40 01'52", long 107°49'18", in NE¼NW¼ sec.28, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 1.7 mi upstream from mouth, 0.1 mi downstream from Little Beaver Creek, and 4.6 mi east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

REMARKS.--Dissolved solids were calculated without using the silica constituent.

COOPERATION.--Chemical quality data are furnished by U.S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT									
06...	1620	23	920	8.2	15.5	450	100	49	28
15...	1250	20	1290	8.2	8.0	620	130	72	52
20...	1440	17	1190	8.2	7.0	620	130	72	45
27...	1125	13	1250	8.3	4.5	640	140	71	46
NOV									
03...	1305	13	1300	8.3	7.0	640	130	76	51
10...	1125	15	1370	8.2	3.0	700	140	85	62
16...	1540	14	1320	8.3	4.0	680	140	81	56
21...	1405	17	1360	8.4	3.0	700	140	86	62
30...	1420	17	1320	8.3	.5	650	130	80	52
DEC									
07...	1500	14	1500	8.3	1.0	790	160	96	68
14...	1325	15	1370	8.2	.5	680	140	81	57
21...	1410	15	1310	8.3	.0	690	140	82	51
28...	1430	17	1350	8.3	.5	700	140	84	54
JAN									
04...	1400	16	1450	8.3	1.0	750	150	91	63
12...	1120	16	1440	8.2	.5	750	150	92	63
23...	1025	9.7	1390	8.3	.0	690	130	89	59
30...	1045	E10	1460	8.4	.0	740	140	94	64
FEB									
08...	1350	E10	1440	8.6	1.0	750	150	92	62
16...	1010	10	1520	8.3	.0	770	150	97	67
23...	0945	13	1580	8.4	.0	810	160	100	70
29...	1435	13	1330	8.4	1.0	720	140	90	57
MAR									
08...	1315	13	1370	8.2	2.0	750	150	91	59
13...	1340	15	1500	8.3	6.0	800	160	97	74
21...	0945	16	1970	8.3	1.0	970	190	120	98
29...	1340	23	1880	8.3	6.0	1000	190	130	110
APR									
04...	1430	27	1920	8.3	7.5	970	190	120	100
12...	1340	40	1630	8.2	6.5	810	160	99	79
19...	0920	150	745	8.1	4.5	340	76	36	30
26...	1445	143	1060	8.4	6.0	510	110	58	47
MAY									
04...	1010	E200	952	8.4	6.0	440	97	49	41
10...	1010	E250	693	8.3	7.5	330	73	35	24
17...	1110	E450	597	8.4	8.5	280	64	29	15
24...	0935	E375	547	8.0	17.0	250	58	25	14
31...	1000	E150	702	8.2	9.0	320	72	35	22
JUN									
07...	0900	E250	973	8.0	6.5	460	100	50	43
13...	1000	E75	815	8.1	11.5	410	90	46	30
21...	0905	E55	952	8.2	13.0	470	100	53	34
28...	1005	60	1020	8.4	14.5	500	110	55	36
JUL									
03...	1050	56	1060	8.4	15.5	550	120	61	40
11...	1440	E50	873	8.1	21.0	420	95	44	23
19...	0940	E60	736	8.0	15.0	360	84	37	18
26...	1020	55	970	8.1	16.5	510	110	57	34
AUG									
02...	1015	E55	1070	8.2	15.0	530	110	61	38
09...	0930	30	1600	8.0	14.5	840	170	100	70
16...	1105	29	920	8.2	18.0	470	100	53	32
24...	1100	E35	1650	8.2	15.0	840	170	100	72
30...	1045	13	1920	8.3	14.0	870	150	120	86
SEP									
04...	1120	13	1910	8.3	13.5	890	160	120	87
17...	0920	E17	1730	8.2	11.0	1100	210	130	110
21...	1145	20	1330	8.4	15.5	670	130	85	59
26...	1430	E19	1650	8.4	10.0	830	150	110	78

E ESTIMATED.

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK NEAR MEEKER, CO

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE, FET-LAB (MG/L AS HCO3)	CAR- BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT									
06...	.6	2.3	230	12	290	11	610	.83	38
15...	.9	9.0	290	.000	470	21	900	1.2	49
20...	.8	2.7	280	14	460	19	880	1.2	40
27...	.8	5.5	310	.000	450	18	890	1.2	31
NOV									
03...	.9	4.7	270	16	480	19	920	1.3	32
10...	1	5.5	330	.000	550	24	1030	1.4	42
16...	1	3.1	330	.000	530	22	1000	1.4	38
21...	1	4.3	320	.000	540	24	1020	1.4	45
30...	.9	2.7	340	.000	490	21	950	1.3	44
DEC									
07...	1	3.1	300	31	600	28	1140	1.6	43
14...	1	4.7	340	.000	510	22	980	1.3	40
21...	.9	2.7	340	.000	480	19	980	1.3	40
28...	.9	3.5	380	.000	500	22	1000	1.4	45
JAN									
04...	1	4.7	380	.000	570	24	1100	1.5	46
12...	1	4.7	380	.000	570	25	1100	1.5	46
23...	1	2.7	330	.000	500	21	970	1.3	25
30...	1	2.7	350	.000	570	27	1080	1.5	--
FEB									
08...	1	2.7	380	.000	550	26	1080	1.5	--
16...	1	4.3	370	.000	590	25	1110	1.5	30
23...	1	3.1	390	.000	630	26	1190	1.6	41
29...	.9	3.1	370	.000	500	22	1000	1.4	35
MAR									
08...	1	3.5	370	.000	490	25	1000	1.4	35
13...	1	11	380	.000	580	27	1140	1.6	46
21...	1	9.4	350	17	810	37	1460	2.0	63
29...	2	7.4	390	.000	860	40	1530	2.1	95
APR									
04...	1	4.7	370	.000	860	36	1500	2.0	107
12...	1	5.1	320	.000	680	30	1220	1.7	132
19...	.7	5.5	180	.000	250	11	500	.68	203
26...	.9	4.7	210	12	400	18	760	1.0	293
MAY									
04...	.9	5.5	220	.000	340	15	660	.90	--
10...	.6	4.7	180	.000	210	9.2	450	.61	--
17...	.4	3.9	160	.000	160	8.2	360	.49	--
24...	.4	2.7	160	.000	140	7.1	330	.45	--
31...	.5	2.3	180	.000	200	9.2	430	.58	--
JUN									
07...	.9	5.5	180	.000	370	17	670	.91	--
13...	.7	2.7	220	.000	270	13	560	.76	--
21...	.7	2.3	240	.000	310	15	640	.87	--
28...	.7	2.3	240	.000	350	15	700	.95	113
JUL									
03...	.8	3.1	260	.000	380	16	750	1.0	113
11...	.5	2.7	220	.000	260	11	550	.75	--
19...	.4	2.0	200	.000	220	8.2	460	.63	--
26...	.7	2.3	250	.000	350	16	700	.95	104
AUG									
02...	.7	3.1	250	.000	380	16	740	1.0	--
09...	1	3.9	340	.000	690	32	1250	1.7	101
16...	.7	2.3	210	.000	350	15	660	.90	51
24...	1	7.4	300	.000	650	30	1190	1.6	--
30...	1	4.3	340	.000	760	35	1330	1.8	47
SEP									
04...	1	3.5	330	.000	760	37	1340	1.8	47
17...	2	9.0	350	.000	880	44	1570	2.1	--
21...	1	3.1	280		510	24	970	1.3	53
26...	1	3.1	310	.000	660	32	1210	1.6	--

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi upstream from Curtis Creek and 2.5 mi east of Meeker.

DRAINAGE AREA.--755 mi^2.

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft, from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi downstream, at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft, higher, prior to Oct. 1, 1933, and at datum 2.00 ft, higher, thereafter.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres above station and about 3,000 acres below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--80 years, 626 ft^3/s; 453,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,950 ft^3/s, May 25, 1984, gage height, 6.12 ft, maximum gage height, 7.60 ft, June 16, 1921; minimum daily discharge, 78 ft^3/s, July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 25	0700	*6,950	6.12	June 16	0700	4,900	5.52

Minimum daily, 266 ft^3/s, Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	507	449	449	399	365	306	397	595	6030	2820	1020	826
2	503	478	451	371	365	311	398	704	5080	2600	1000	796
3	554	446	439	396	360	311	399	728	4510	2450	919	723
4	568	436	446	436	360	297	400	675	4250	2210	925	701
5	573	433	428	395	360	266	425	696	4200	2010	908	675
6	549	432	428	387	350	302	489	707	3970	1820	1020	655
7	521	431	440	391	350	308	503	653	5500	1680	942	634
8	514	492	438	391	350	314	517	662	4280	1620	924	632
9	513	465	434	400	350	319	574	778	3490	1650	872	618
10	513	448	434	360	350	318	492	980	3020	1870	856	604
11	541	455	427	390	345	313	536	1280	3090	1590	861	608
12	531	452	429	400	345	314	476	1730	3140	1430	852	629
13	521	453	428	383	345	314	476	2070	3150	1380	801	639
14	557	457	429	409	345	328	462	2220	3530	1420	764	595
15	556	421	434	400	345	345	485	2800	4130	1310	748	593
16	523	440	429	334	345	348	539	3090	4650	1250	823	674
17	515	445	423	375	345	343	604	3240	4260	1160	773	666
18	518	459	414	370	345	370	752	3110	3850	1090	778	604
19	531	448	413	365	344	343	833	2650	3710	1030	853	596
20	512	444	389	365	294	341	773	2910	3840	984	1050	594
21	508	457	363	365	339	358	654	3460	4040	954	1050	615
22	500	442	341	365	349	389	614	3550	4090	940	910	649
23	496	416	373	365	310	362	612	4210	3800	920	824	611
24	492	452	350	365	308	365	701	5400	3600	1050	864	609
25	487	465	376	365	318	382	793	6320	3510	1170	876	690
26	482	463	440	365	305	366	719	5700	3090	1110	818	670
27	476	449	461	365	280	363	665	5530	3010	1050	781	698
28	470	458	417	365	306	353	624	4750	3160	984	765	638
29	465	446	356	365	315	360	610	4040	2930	943	749	644
30	460	446	395	365	---	396	635	4370	2920	1070	733	668
31	452	---	413	365	---	379	---	4400	---	1060	773	---
TOTAL	15908	13478	12887	11732	9788	10484	17157	84008	115830	44625	26832	19554
MEAN	513	449	416	378	338	338	572	2710	3861	1440	866	652
MAX	573	492	461	436	365	396	833	6320	6030	2820	1050	826
MIN	452	416	341	334	280	266	397	595	2920	920	733	593
AC-FT	31550	26730	25560	23270	19410	20800	34030	166600	229700	88510	53220	38790

CAL YR 1983 TOTAL 323057 MEAN 885 MAX 6100 MIN 250 AC-FT 640800
WTR YR 1984 TOTAL 382283 MEAN 1044 MAX 6320 MIN 266 AC-FT 758300

NOTE.--NO GAGE-HEIGHT RECORD DEC. 19 TO MAR. 31.

09304550 CURTIS CREEK NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°02'22", long 107°52'53", in SE¼NW¼ sec.24, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 0.6 mi upstream from mouth, 1.6 mi east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

REMARKS.--Dissolved solids were calculated without using the silica constituent.

COOPERATION.--Chemical quality data are furnished by U.S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT									
06...	1530	1.8	2100	8.5	17.0	770	79	140	230
15...	1345	1.7	2140	8.5	10.5	930	110	160	240
20...	1500	1.6	2120	8.4	9.5	780	80	140	210
27...	1245	1.4	1950	8.5	6.5	770	78	140	230
NOV									
03...	1325	1.4	2350	8.5	9.5	870	86	160	230
10...	1300	1.6	2500	8.4	4.5	970	110	170	260
16...	1555	1.6	2400	8.5	4.5	900	97	160	250
21...	1515	1.6	2780	8.4	3.0	1000	110	180	300
30...	1600	1.6	2000	8.4	.0	890	92	160	230
DEC									
07...	1615	E1.6	2400	8.3	.0	960	120	160	240
14...	1300	E1.5	2700	8.3	.0	1000	120	170	270
21...	1315	1.0	2900	8.4	.0	1200	140	200	320
28...	1400	E1.1	2430	8.4	.0	970	110	170	260
JAN									
04...	1335	E1.1	2380	8.4	.5	960	120	160	250
12...	1010	E1.0	2320	8.2	.5	910	100	160	230
23...	0950	E1.0	2400	8.3	.0	970	110	170	250
30...	1015	E1.0	2420	8.5	.0	930	110	160	240
FEB									
08...	1325	E1.0	2410	8.8	.0	1000	120	170	240
16...	0945	E1.0	3010	8.4	.0	1200	150	200	320
23...	0915	E.90	2450	8.6	.0	1000	120	170	260
29...	1400	E1.0	2340	8.5	.5	1000	120	170	250
MAR									
08...	1250	E1.0	2410	8.3	.0	1000	120	170	250
13...	1410	1.5	2600	8.5	4.0	1100	130	180	290
21...	0855	1.9	3410	8.5	1.0	1300	160	230	370
29...	1320	3.1	3060	8.5	10.0	1200	140	200	310
APR									
04...	1410	2.6	3730	8.7	12.5	1400	150	250	410
12...	1330	E3.1	2950	8.7	9.5	1100	120	190	300
19...	0850	E9.0	1510	8.5	6.5	620	86	99	140
26...	1335	16	1640	8.6	7.0	650	94	100	150
MAY									
04...	1055	15	1630	8.5	7.5	630	88	100	140
10...	0935	17	1380	8.5	9.5	580	88	88	110
17...	1000	30	1020	8.4	12.5	470	83	63	55
24...	0920	E15	1390	8.2	17.0	630	97	93	99
31...	0930	E10	1560	8.5	12.5	660	100	100	120
JUN									
07...	0845	E15	1110	8.4	7.0	530	91	74	91
13...	0930	E8.0	1410	8.3	12.5	650	100	98	110
21...	0845	E8.0	1440	8.4	12.5	700	100	110	120
28...	0915	9.0	1720	8.6	14.0	730	96	120	130
JUL									
03...	0930	5.1	1600	8.4	15.0	720	91	120	150
11...	1410	E4.0	1610	8.4	25.0	670	85	110	120
19...	0900	3.1	1680	8.3	15.5	760	91	130	150
26...	0910	3.6	1950	8.3	17.0	770	96	130	160
AUG									
02...	0950	3.4	2040	8.4	16.0	830	100	140	170
09...	0910	2.6	1850	8.2	14.5	800	89	140	150
16...	0950	2.2	2040	8.4	17.5	790	87	140	180
24...	1025	E5.0	2650	8.4	15.5	1000	140	170	240
30...	0945	2.5	2040	8.4	13.5	820	83	150	180
SEP									
04...	1025	1.9	2270	8.4	12.5	910	100	160	200
17...	0900	2.3	2250	8.3	10.0	930	110	160	210
21...	1030	2.5	2370	8.4	13.5	950	100	170	220
26...	1400	2.2	2440	8.6	10.0	950	100	170	220

E ESTIMATED.

09304550 CURTIS CREEK NEAR MEEKER, CO

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE, FET-LAB (MG/L AS HCO3)	CAR- BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT									
06...	4	10	490	37	710	66	1510	2.1	7.3
15...	3	15	480	36	900	99	1790	2.4	8.2
20...	3	13	540	.000	740	72	1520	2.1	6.6
27...	4	8.2	580	.000	710	66	1520	2.1	5.7
NOV									
03...	3	7.8	580	.000	820	77	1660	2.3	6.3
10...	4	9.4	510	38	920	110	1870	2.5	8.1
16...	4	7.8	530	.000	890	100	1770	2.4	7.6
21...	4	8.2	550	.000	1000	170	2030	2.8	8.8
30...	3	7.4	570	.000	800	90	1650	2.2	7.1
DEC									
07...	3	10	500	58	870	98	1800	2.4	--
14...	4	7.4	500	53	960	130	1970	2.7	--
21...	4	9.4	680	.000	1100	140	2250	3.1	6.1
28...	4	7.8	580	.000	980	120	1930	2.6	--
JAN									
04...	4	8.2	630	.000	890	110	1860	2.5	--
12...	3	9.0	630	.000	830	100	1740	2.4	--
23...	4	7.4	620	.000	820	110	1770	2.4	--
30...	3	7.0	550	.000	790	110	1680	2.3	--
FEB									
08...	3	7.0	610	.000	800	130	1760	2.4	--
16...	4	8.6	640	.000	1100	220	2270	3.1	--
23...	4	7.4	600	.000	910	140	1900	2.6	--
29...	3	7.4	600	.000	790	91	1720	2.3	--
MAR									
08...	3	7.4	610	.000	820	100	1770	2.4	--
13...	4	8.2	570	.000	880	140	1910	2.6	7.7
21...	4	10	580	.000	1400	240	2650	3.6	14
29...	4	10	450	25	1100	190	2230	3.0	19
APR									
04...	5	9.8	470	.000	1500	290	2840	3.9	20
12...	4	9.4	380	18	1200	170	2150	2.9	--
19...	2	8.2	450	.000	510	60	1120	1.5	--
26...	3	7.0	370	25	560	72	1190	1.6	50
MAY									
04...	2	7.0	380	25	550	60	1160	1.6	48
10...	2	9.0	390	25	410	40	970	1.3	44
17...	1	7.0	330	22	250	20	660	.90	53
24...	2	7.8	380	33	410	37	970	1.3	--
31...	2	7.4	430	20	490	46	1100	1.5	--
JUN									
07...	2	7.4	310	.000	390	46	860	1.2	--
13...	2	7.0	420	22	450	44	1040	1.4	--
21...	2	6.6	440	18	490	44	1110	1.5	--
28...	2	6.6	480	.000	540	47	1180	1.6	29
JUL									
03...	2	6.6	470	12	550	46	1200	1.6	17
11...	2	7.4	420	12	530	46	1130	1.5	--
19...	2	6.6	500	.000	620	49	1290	1.8	11
26...	3	7.4	440	17	660	66	1360	1.8	13
AUG									
02...	3	7.0	480	.000	710	67	1430	1.9	13
09...	2	6.6	460	12	660	53	1340	1.8	9.4
16...	3	7.4	450	13	720	58	1430	1.9	8.5
24...	3	8.6	460	.000	910	160	1850	2.5	--
30...	3	7.0	460	18	740	64	1470	2.0	9.9
SEP									
04...	3	7.0	460	25	850	76	1660	2.3	8.5
17...	3	8.2	490	11	870	83	1700	2.3	11
21...	3	7.8	470	.000	900	82	1720	2.3	12
26...	3	7.8	490	.000	910	82	1740	2.4	10

09304600 WHITE RIVER AT MEEKER, CO

LOCATION.--Lat 40°02'00", long 107°55'05", in NE¼NE¼ sec.27, T.1 N., R.94 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank, at 10th Street bridge, 0.4 mi upstream from Flag Creek, and 0.6 mi downstream from Sulphur Creek.

DRAINAGE AREA.--808 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 12,000 acres above station and about 3,000 acres below.

AVERAGE DISCHARGE.--6 years, 744 ft^3/s; 539,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft^3/s, May 25, 1984, gage height, 6.93 ft; maximum gage height, about 12.0 ft, Jan. 31, 1979, (ice jam); minimum daily discharge, 141 ft^3/s, Aug. 29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 19	1800	ice jam	*9.21	June 16	0700	5,600	7.67
May 25	1400	*6,880	6.93	July 10	1000	2,470	6.52

Minimum daily discharge, 277 ft^3/s, Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	520	477	449	390	317	398	592	6100	2980	1340	898
2	573	522	485	417	390	322	393	741	5200	2820	1320	838
3	651	519	466	450	380	322	379	761	4600	2700	1170	731
4	667	501	475	489	380	310	383	700	4300	2540	1170	690
5	674	493	442	449	380	277	422	751	4200	2350	1170	652
6	648	492	420	441	370	313	483	774	4100	2130	1330	624
7	607	488	446	444	370	319	499	714	5600	1930	1210	601
8	593	582	463	437	370	322	499	732	4300	1910	1180	598
9	593	539	460	446	370	325	562	893	3700	1950	1120	583
10	590	505	456	407	370	325	465	1210	3100	2240	1120	558
11	630	514	452	432	370	321	519	1610	3100	1850	1100	567
12	612	511	450	443	370	325	444	2180	3190	1680	1080	605
13	601	511	447	428	370	326	443	2300	3220	1510	960	621
14	684	520	445	448	370	339	415	2600	3710	1550	888	561
15	668	461	453	436	370	354	445	3000	4440	1410	853	559
16	615	488	441	366	370	358	512	3300	5290	1320	995	683
17	604	498	439	409	370	357	581	3500	4960	1220	897	685
18	613	509	433	390	360	381	761	2730	4710	1150	922	587
19	635	545	439	390	355	355	898	2760	4610	1090	1050	575
20	600	518	416	390	312	353	814	2550	4590	1040	1420	579
21	599	499	391	380	352	370	678	3880	4690	1010	1390	615
22	591	485	369	380	356	398	609	4000	4490	994	1150	664
23	583	448	403	380	317	371	607	4930	4150	988	967	616
24	573	485	382	380	320	374	709	5660	3880	1240	1030	609
25	568	506	411	380	326	390	815	5990	3560	1450	971	737
26	559	504	481	390	315	373	750	5610	3210	1360	869	713
27	557	459	502	390	292	371	653	5500	3140	1320	796	687
28	548	472	460	390	316	365	603	4900	3110	1210	752	662
29	542	481	396	390	322	372	600	4200	3080	1170	728	670
30	533	473	441	390	---	382	583	4500	3050	1250	692	661
31	528	---	462	390	---	387	---	4600	---	1400	678	---
TOTAL	18558	15048	13703	12801	10303	10774	16922	88168	123380	50762	32318	19429
MEAN	599	502	442	413	355	348	564	2844	4113	1637	1043	648
MAX	684	582	502	489	390	398	898	5990	6100	2980	1420	898
MIN	519	448	369	366	292	277	379	592	3050	988	678	558
AC-FT	36810	29850	27180	25390	20440	21370	33560	174900	244700	100700	64100	38540

CAL YR 1983 TOTAL 338481 MEAN 927 MAX 6000 MIN 260 AC-FT 671400
WTR YR 1984 TOTAL 412166 MEAN 1126 MAX 6100 MIN 277 AC-FT 817500

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to current year.
WATER TEMPERATURES: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1978.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Dissolved solids were calculated without using the silica constituent.

COOPERATION.--Chemical quality data are furnished by the U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 810 micromhos Nov. 29, 1979; minimum, 134 micromhos May 29, 1983.
WATER TEMPERATURES: Maximum, 23.0°C July 21, 28, 30, 1980; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 718 micromhos May 2; minimum, 211 micromhos May 14.
WATER TEMPERATURES: Maximum, 20.0°C on August 14; minimum, 0.0°C on many days during November to April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT									
06...	1650	648	440	8.7	12.5	200	59	14	7.6
15...	1330	668	430	8.7	7.5	220	62	15	9.9
20...	1550	600	427	8.8	8.0	200	56	14	6.7
27...	1300	557	431	8.7	6.5	200	57	14	7.6
NOV									
03...	1010	519	455	8.4	5.0	200	59	14	7.6
10...	1240	505	461	8.7	4.0	220	63	15	11
16...	1340	488	461	8.6	3.0	220	63	15	12
21...	1400	499	448	8.8	3.0	220	62	15	11
30...	1545	463	466	8.6	.0	230	63	17	12
DEC									
07...	1555	446	475	8.5	.0	230	63	17	11
14...	1445	445	485	8.7	.5	230	63	17	12
21...	1540	391	495	8.9	.0	230	66	17	11
28...	1550	460	458	8.6	.5	220	62	15	9.9
JAN									
04...	1510	489	431	8.5	.5	200	59	14	7.6
12...	1150	443	469	8.5	.0	220	64	15	9.9
23...	1325	380	466	8.4	.0	220	63	15	11
30...	1205	390	491	8.7	.0	230	67	16	13
FEB									
08...	1515	370	461	8.7	.0	220	63	15	11
16...	1130	370	498	8.5	.0	240	67	17	14
23...	1300	317	492	8.6	.5	230	66	15	12
29...	1515	322	554	8.6	3.0	260	70	21	18
MAR									
08...	1420	322	525	8.6	4.0	250	67	20	15
13...	1540	326	480	8.8	7.0	230	64	17	14
21...	1150	370	562	9.0	5.5	260	68	21	19
29...	1420	372	599	9.0	7.5	270	66	25	26
APR									
04...	1515	383	655	9.1	8.5	280	69	27	24
12...	1430	444	646	8.5	6.0	300	76	27	22
19...	1015	990	551	8.3	7.0	250	63	23	18
26...	1535	750	610	8.6	5.5	290	73	26	20
MAY									
04...	1115	700	638	8.5	6.5	300	74	27	21
10...	1115	1210	492	8.2	8.0	230	58	20	12
17...	1220	3500	310	8.2	6.5	140	39	11	5.3
24...	1315	5510	240	7.9	14.5	120	34	7.9	3.7
31...	1125	4600	214	8.3	7.0	120	34	7.7	3.4
JUN									
07...	1100	5600	254	8.1	5.5	140	37	12	7.1
13...	1040	3220	300	8.0	9.0	140	38	9.8	4.8
21...	0945	4690	254	8.1	9.0	110	32	8.2	3.7
28...	1145	3110	256	8.3	11.0	120	35	8.7	4.4
JUL									
03...	1145	2700	266	8.4	12.5	120	34	8.6	4.4
11...	1550	1850	348	8.3	16.5	150	43	11	5.7
19...	1030	1090	372	8.3	14.0	170	49	12	6.9
26...	1110	1360	368	8.3	14.5	170	49	12	7.6
AUG									
02...	1115	1320	407	8.5	14.0	190	53	14	5.5
09...	1015	1120	377	8.4	13.5	180	52	13	7.8
16...	1205	995	399	8.7	16.5	190	53	14	5.5
24...	1210	1030	488	8.5	15.0	240	63	20	13
30...	1210	692	448	8.6	14.5	210	58	15	9.9
SEP									
04...	1225	690	430	8.6	13.5	200	57	15	8.7
17...	1010	685	430	8.3	10.5	210	58	17	9.9
21...	1300	615	440	8.8	14.5	220	59	17	11
26...	1520	713	430	8.8	9.0	210	58	15	9.9

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
06...	.2	1.2	130	15	98	6.7	270	.37	472
15...	.3	5.1	130	12	110	7.8	280	.38	505
20...	.2	1.2	110	18	100	7.1	260	.35	421
27...	.2	1.2	130	10	97	6.7	260	.35	391
NOV									
03...	.2	.80	130		98	7.1	260	.35	364
10...	.3	3.9	130	12	110	8.2	290	.39	395
16...	.4	3.5	120	18	110	8.9	290	.39	382
21...	.3	4.7	110	19	110	7.8	280	.38	377
30...	.4	3.1	130	13	120	8.2	290	.39	363
DEC									
07...	.3	1.2	130	13	110	8.5	290	.39	349
14...	.4	1.2	110	22	120	8.5	300	.41	360
21...	.3	2.7	140		120	11	300	.41	317
28...	.3	1.2	130		110	9.2	280	.38	348
JAN									
04...	.2	1.6	140		110	8.5	27	.37	356
12...	.3	3.1	150		120	9.2	2	.39	347
23...	.3	1.2	140		110	7.4	[illegible]	.38	287
30...	.4	1.2	160		120	9.9	[illegible]	.41	316
FEB									
08...	.3	1.2	130	10	110	8.5	26	.38	280
16...	.4	1.2	140	11	120	11	310	.42	310
23...	.4	1.2	140		110	9.6	290	.39	248
29...	.5	1.2	140	10	130	11	340	.46	296
MAR									
08...	.4	1.2	120	19	130	11	320	.44	278
13...	.4	1.2	120		120	11	300	.41	264
21...	.5	2.3	140	10	150	13	350	.48	350
29...	.7	9.4	130		170	13	380	.52	382
APR									
04...	.6	2.3	140		180	15	390	.53	403
12...	.6	1.6	160		190	14	410	.56	492
19...	.5	3.1	160		150	7.8	340	.46	909
26...	.5	2.0	150	13	180	11	390	.53	790
MAY									
04...	.5	2.3	180	.000	180	10	410	.56	775
10...	.4	2.3	160	.000	130	6.4	300	.41	980
17...	.2	1.6	120	.000	52	2.5	170	.23	1610
24...	.2	1.2	110	.000	33	1.8	140	.19	2080
31...	.1	.80	110	.000	27	2.1	130	.18	1610
JUN									
07...	.3	1.6	110	.000	60	3.2	180	.24	2720
13...	.2	.80	130	.000	42	2.5	160	.22	1390
21...	.2	.80	110	.000	32	1.8	130	.18	1650
28...	.2	2.0	100	.000	37	2.1	140	.19	1180
JUL									
03...	.2	.80	110	.000	40	2.1	140	.19	1020
11...	.2	1.2	130	.000	56	3.5	180	.24	899
19...	.2	1.2	140	.000	68	4.6	210	.29	618
26...	.3	1.2	140	.000	70	4.6	210	.29	771
AUG									
02...	.2	1.2	140	.000	83	5.0	230	.31	820
09...	.3	1.2	140	.000	77	5.0	220	.30	665
16...	.2	1.2	130		83	5.7	230	.31	618
24...	.4	1.6	160	.000	120	7.2	310	.42	862
30...	.3	.80	140		92	6.4	270	.37	504
SEP									
04...	.3	.80	140		90	6.0	270	.37	503
17...	.3	1.2	150	.000	96	6.7	280	.38	518
21...	.3	1.2	150	.000	100	6.7	280	.38	465
26...	.3	.80	130		96	6.0	270	.37	520

09304600 WHITE RIVER AT MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	452	450	460	511	499	639	607	247	264	406	403
2	487	447	446	487	499	498	638	676	249	265	394	395
3	487	442	458	479	496	500	631	627	248	266	377	407
4	472	446	450	443	492	510	650	613	255	267	386	417
5	446	449	460	458	484	528	641	598	269	276	378	424
6	435	448	456	465	484	524	634	553	292	281	363	423
7	425	447	465	468	478	505	610	533	315	297	371	422
8	431	454	457	470	463	498	---	521	311	283	368	422
9	428	461	454	467	470	482	---	---	322	266	377	424
10	427	464	459	492	472	489	---	478	322	294	384	429
11	424	465	452	490	461	500	---	391	299	308	386	431
12	428	463	453	480	474	503	671	364	290	335	384	438
13	434	460	446	495	472	507	622	355	285	354	396	444
14	441	454	448	477	466	519	611	261	267	357	397	442
15	432	469	462	488	484	516	601	313	256	375	404	440
16	426	458	464	530	503	528	556	303	256	378	394	436
17	423	451	452	535	489	541	---	297	264	365	399	429
18	425	456	453	551	492	538	---	296	258	363	410	433
19	415	---	450	531	492	544	544	306	259	364	399	442
20	437	---	---	510	511	565	564	284	247	370	416	429
21	441	---	484	507	510	561	568	269	241	373	402	440
22	438	459	471	503	477	564	572	267	235	382	391	453
23	437	475	---	492	503	568	567	253	238	392	---	439
24	439	462	---	481	521	581	569	239	240	385	465	439
25	435	453	---	481	487	576	562	238	241	397	428	419
26	438	447	---	475	498	580	611	242	258	370	420	429
27	439	466	---	480	522	571	618	239	258	377	418	430
28	437	455	465	494	503	571	633	243	255	388	424	422
29	439	451	506	497	499	591	606	243	252	393	421	418
30	440	461	463	504	---	614	601	237	253	401	424	417
31	446	---	---	522	---	616	---	239	---	386	422	---
MEAN	440	456	459	491	490	538	605	370	266	341	400	428

WTR YR 1984 MEAN 437 MAX 676 MIN 235

09304600 WHITE RIVER AT MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	9.5	8.0	5.5	1.5	.0	.0	.0	.0	.0	3.5	.0
2	10.5	8.5	7.5	5.0	3.0	1.0	.0	.0	.0	.0	5.0	1.0
3	8.5	7.0	8.0	4.5	2.0	.5	.0	.0	.0	.0	5.5	2.5
4	11.0	5.5	8.0	4.0	2.0	.0	.0	.0	.0	.0	4.0	.0
5	12.0	7.0	6.5	4.5	.0	.0	.0	.0	.0	.0	1.0	.0
6	12.5	7.5	8.0	4.0	.0	.0	.0	.0	.0	.0	2.0	.0
7	11.5	8.0	8.5	4.5	.0	.0	.0	.0	.0	.0	4.0	.0
8	11.5	7.0	7.5	3.0	2.0	.0	.0	.0	.0	.0	5.0	.0
9	11.5	8.5	4.5	1.0	2.5	.0	.0	.0	.0	.0	5.0	1.5
10	10.5	8.5	5.0	1.5	2.5	1.5	.0	.0	.0	.0	7.0	1.5
11	10.0	7.0	5.0	3.0	2.5	.5	.0	.0	.0	.0	5.5	3.0
12	10.0	5.5	6.0	3.5	3.0	1.5	.0	.0	.0	.0	4.5	1.5
13	10.0	5.5	6.5	4.0	2.0	.0	.0	.0	.0	.0	7.0	1.0
14	9.0	6.5	5.0	1.5	.0	.0	.0	.0	.5	.0	5.0	3.0
15	8.5	5.0	3.0	.0	1.0	.0	.0	.0	.5	.0	6.5	1.5
16	8.5	4.5	4.0	.5	.0	.0	.0	.0	.5	.0	7.0	4.0
17	8.0	4.5	4.5	1.5	1.5	.0	.0	.0	.5	.0	6.0	1.0
18	9.0	7.0	4.0	3.5	1.0	.0	.0	.0	1.5	.0	4.0	1.5
19	8.5	5.0	---	---	1.5	.0	.0	.0	1.0	.0	7.0	.5
20	8.0	4.0	---	---	.5	.0	.0	.0	.0	.0	7.5	1.5
21	9.0	4.5	---	---	.0	.0	.0	.0	.5	.0	8.5	2.5
22	9.0	4.5	1.5	.0	.0	.0	.0	.0	2.5	.0	5.5	2.5
23	9.0	4.5	.0	.0	.0	.0	.0	.0	1.5	.0	7.5	2.0
24	6.5	5.0	.5	.0	.0	.0	.0	.0	1.5	.0	8.0	2.0
25	8.0	4.0	2.5	.5	.0	.0	.0	.0	2.0	.0	7.5	3.5
26	8.0	4.0	1.5	.0	.0	.0	.0	.0	3.0	.0	5.0	2.0
27	8.5	4.0	.0	.0	.0	.0	.0	.0	1.0	.0	7.5	2.0
28	7.5	3.5	.5	.0	.0	.0	.0	.0	1.0	.0	7.5	2.0
29	8.0	4.0	.5	.0	.0	.0	.0	.0	3.0	.0	8.0	2.5
30	8.0	4.5	.5	.0	.0	.0	.0	.0	---	---	6.5	3.0
31	8.0	5.5	---	---	.0	.0	.0	.0	---	---	8.0	3.0
MONTH	12.5	3.5	8.5	.0	3.0	.0	.0	.0	3.0	.0	8.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.0	7.5	5.0	8.5	7.0	15.0	9.5	16.5	13.5	16.0	13.5
2	5.5	2.5	9.0	5.0	11.0	5.5	15.5	11.0	17.0	12.5	15.5	10.0
3	7.5	2.0	9.0	5.5	10.0	7.0	15.5	11.0	18.0	12.5	16.0	10.5
4	8.5	1.5	8.5	5.0	10.0	6.0	15.5	11.0	18.5	12.5	16.5	11.0
5	9.5	3.5	9.5	5.0	9.5	7.0	16.0	11.0	17.0	13.5	16.0	11.0
6	9.5	5.0	9.0	5.5	7.0	5.5	16.5	11.5	17.5	13.0	16.0	11.5
7	9.5	5.0	9.5	3.5	8.0	5.0	17.0	12.0	18.0	13.0	14.5	12.0
8	10.5	4.0	12.0	5.0	7.0	5.0	17.0	13.5	18.5	13.0	15.0	9.0
9	8.0	3.5	12.5	6.5	9.0	4.5	16.5	13.0	18.5	13.0	16.0	10.0
10	7.0	1.5	12.5	7.0	11.0	5.5	17.0	13.0	18.5	13.5	16.0	11.0
11	7.0	3.0	12.5	7.0	12.0	8.0	17.0	12.0	18.5	13.0	14.0	11.5
12	6.0	.0	11.0	6.0	12.5	7.5	17.0	12.0	17.5	14.0	14.5	10.5
13	9.5	3.0	10.5	5.5	12.5	8.0	16.0	13.5	18.5	13.5	16.0	11.5
14	9.5	3.0	11.5	5.0	13.0	8.0	17.0	13.0	20.0	14.5	16.5	11.5
15	10.5	3.5	9.5	5.5	12.5	9.5	17.0	13.0	17.5	14.5	14.0	11.5
16	11.5	4.0	10.0	5.5	11.0	8.5	17.5	12.0	17.0	14.5	14.0	11.0
17	11.5	5.5	10.5	4.0	13.0	8.0	18.0	12.5	18.5	13.5	15.5	9.5
18	12.5	7.0	9.0	5.0	11.0	8.0	17.5	12.5	17.5	14.5	16.0	10.5
19	10.0	6.0	11.0	4.5	12.0	8.0	19.0	13.5	17.5	13.5	14.5	11.0
20	7.0	4.0	11.0	5.5	12.5	9.0	18.5	14.0	16.0	13.0	15.0	10.0
21	8.0	2.5	9.5	5.5	13.0	8.5	19.5	14.0	15.5	11.5	14.5	11.5
22	8.0	3.0	11.5	5.5	13.0	8.0	18.5	14.5	15.5	12.0	13.5	9.5
23	9.5	4.5	11.5	5.5	13.0	8.5	18.5	13.5	15.0	12.5	14.5	9.5
24	9.0	6.0	10.5	6.0	13.5	8.5	19.0	13.5	16.5	13.0	12.5	9.5
25	8.0	3.5	10.5	6.0	13.0	9.5	19.0	14.0	15.0	12.0	11.0	6.5
26	6.0	1.5	11.0	5.5	14.0	9.0	17.5	13.5	17.0	11.5	9.0	6.5
27	7.5	1.0	11.0	6.0	14.5	9.5	17.0	12.5	18.0	12.0	12.0	7.0
28	5.5	2.0	11.0	5.5	15.0	10.0	17.5	13.0	18.0	12.5	11.0	7.5
29	7.0	2.5	12.0	6.5	15.0	10.5	18.5	13.0	18.0	12.5	10.0	5.5
30	7.0	4.0	11.0	6.5	13.5	11.0	16.5	14.0	18.0	12.0	10.5	5.0
31	---	---	10.5	6.5	---	---	17.0	12.5	18.0	13.0	---	---
MONTH	12.5	.0	12.5	3.5	15.0	4.5	19.5	9.5	20.0	11.5	16.5	5.0
YEAR	20.0	.0										

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from county bridge, 4.5 mi downstream from Strawberry Creek, and 10 mi west of Meeker.

DRAINAGE AREA.--1,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversion above station for irrigation of about 22,000 acres above station, and a few small hay meadows below.

AVERAGE DISCHARGE.--23 years, 648 ft³/s; 469,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,590 ft³/s, June 26, 1983, gage height, 4.97 ft; minimum daily, 85 ft³/s, June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 25	1000	*6,320	5.06	July 7	1500	2,260	3.13
June 7	1100	6,010	5.03				

Minimum daily discharge, 310 ft³/s, Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	492	531	430	395	345	500	626	4620	2830	948	781
2	658	436	518	425	395	350	500	818	4440	2370	918	736
3	737	431	503	425	390	350	500	866	3980	1930	915	711
4	741	430	518	425	390	350	500	765	3880	1750	1010	694
5	716	425	482	425	390	355	535	790	3700	1670	947	678
6	693	418	439	424	380	360	600	811	3880	1720	917	667
7	637	424	466	420	380	370	615	742	5210	2020	854	666
8	615	411	492	420	380	375	625	730	4450	1770	834	640
9	612	423	525	430	380	390	685	866	3790	1600	820	634
10	598	422	518	390	380	390	600	1170	3140	1430	811	672
11	630	418	512	420	375	395	650	1630	3140	1500	742	723
12	616	416	503	430	375	395	590	2300	3160	1410	700	709
13	601	435	505	415	375	415	590	2830	3090	1320	668	654
14	677	407	490	440	375	411	580	3070	3350	1230	752	662
15	679	354	504	430	375	420	596	3680	3720	1140	762	792
16	622	364	496	465	375	439	713	3990	4090	1070	711	792
17	592	389	491	405	375	419	795	4110	4080	1010	817	708
18	587	388	491	400	375	441	1070	4080	3660	969	980	678
19	606	411	503	395	375	409	999	3500	3430	945	1160	675
20	581	513	476	395	375	430	849	3710	3330	947	937	740
21	563	499	417	395	370	450	710	4150	3540	986	851	793
22	554	380	421	395	380	480	666	4240	3640	1220	885	729
23	549	487	448	395	340	450	703	4370	3470	1230	928	699
24	542	493	446	395	340	455	818	5020	3280	1280	840	783
25	537	434	464	395	350	470	967	5850	3230	1110	789	769
26	529	429	472	395	335	455	831	5250	2980	1040	757	744
27	522	486	459	395	310	455	741	5060	2860	985	727	716
28	511	503	428	395	335	445	680	4100	2840	1090	705	714
29	500	515	437	395	345	450	659	3590	2820	1140	680	695
30	497	502	446	395	---	450	617	3580	2840	1110	702	695
31	495	---	430	395	---	485	---	3680	---	1040	871	---
TOTAL	18589	13135	14831	12754	10715	12854	20484	89974	107640	42862	25938	21349
MEAN	600	438	478	411	369	415	683	2902	3588	1383	837	712
MAX	741	515	531	465	395	485	1070	5850	5210	2830	1160	793
MIN	495	354	417	390	310	345	500	626	2820	945	668	634
AC-FT	36870	26050	29420	25300	21250	25500	40630	178500	213500	85020	51450	42350

CAL YR 1983 TOTAL 348490 MEAN 955 MAX 6060 MIN 270 AC-FT 691200
WTR YR 1984 TOTAL 391125 MEAN 1069 MAX 5850 MIN 310 AC-FT 775800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 9 TO MAR. 11.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1983.
WATER TEMPERATURES: July 1978 to September 1983.

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1983.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 908 micromhos Aug. 30, 1981; minimum, 221 micromhos June 13, 1980.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 7, 1978, Aug. 7, 1980; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
DEC 07...	1225	450	--	8.7	.0	12.6	240	67	18	17
JUL 20...	1030	947	432	8.4	18.0	8.2	210	55	17	13
SEP 10...	1300	672	510	8.8	15.0	12.0	230	60	20	16

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
DEC 07...	.5	1.2	139	120	8.9	.10	15	330	.45	403
JUL 20...	.4	1.5	134	95	7.0	.20	15	280	.39	728
SEP 10...	.5	1.7	143	120	7.3	.20	15	330	.44	593

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
DEC 07...	<.010	.16	.020	--	<.20	.010	.030	20	640
JUL 20...	<.010	<.10	.040	.26	.30	.010	<.010	20	480
SEP 10...	<.010	<.10	.030	.27	.30	.010	.040	30	600

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
SEP							
10...	<1	35	<1	<10	<1	14	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
SEP							
10...	14	<.1	<1	<1	3	<1	5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
NOV					DEC				
02...	1005	504	490	7.5	08...	1020	516	500	1.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC					SEP				
07...	1225	450	23	28	10...	1300	672	79	143
JUL									
20...	1030	947	66	169					

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft downstream from private bridge, 1,100 ft upstream from Stewart Gulch, and 14.3 mi west of Rio Blanco.

DRAINAGE AREA.--177 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,366 ft, from topographic map.

REMARKS.--Records good. Several diversions above station for irrigation of hay meadows.

AVERAGE DISCHARGE.--10 years, 19.6 ft^3/s; 14,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft^3/s July 19, 1977, gage height, 7.01 ft, from rating curve based on indirect measurement of peak flow, maximum gage height, 7.47 ft, May 16, 1984; minimum daily discharge, 0.47 ft^3/s, Apr. 25, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 19	0200	120	5.44	May 16	0530	*419	7.47
Apr 26	1500	130	5.63	June 7	1200	264	7.01

Minimum daily discharge, 10 ft^3/s, Feb. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	13	11	13	13	33	103	116	89	60	37
2	17	17	14	12	13	13	34	116	107	85	61	37
3	19	17	13	12	13	13	34	118	99	86	59	35
4	20	16	14	14	13	13	34	123	97	88	62	34
5	20	16	13	14	13	14	37	138	96	90	57	32
6	20	15	15	13	14	13	40	146	98	96	59	31
7	20	15	12	12	12	13	44	146	236	84	60	30
8	19	18	13	12	10	13	54	154	214	79	57	30
9	18	17	12	12	11	13	70	179	197	79	56	30
10	18	16	13	12	10	13	60	213	183	89	54	29
11	17	16	13	11	11	14	61	268	171	72	52	28
12	17	17	13	11	13	14	56	334	165	68	52	28
13	18	16	13	12	11	14	56	381	157	67	51	28
14	24	16	13	12	11	15	57	396	148	68	52	27
15	24	15	13	12	11	16	62	410	139	66	49	26
16	21	15	13	12	12	16	79	387	135	63	49	29
17	20	15	12	12	11	17	97	335	130	61	51	30
18	19	15	12	12	12	19	121	285	124	60	47	28
19	18	15	12	12	13	16	131	265	116	58	47	27
20	18	15	12	12	12	16	125	254	110	56	52	27
21	18	15	12	13	12	20	103	243	105	54	51	27
22	20	14	12	13	12	22	94	231	101	52	46	26
23	20	15	12	13	12	21	99	219	98	55	44	25
24	19	13	11	13	13	23	113	206	92	57	43	25
25	19	14	11	13	12	27	131	195	92	58	43	25
26	20	14	11	13	12	27	125	180	93	56	42	25
27	20	13	11	13	13	29	113	164	90	57	40	25
28	19	13	12	13	13	28	109	146	87	56	39	24
29	19	13	12	12	14	30	102	133	86	58	37	24
30	19	13	11	12	---	31	100	123	85	59	36	23
31	19	---	11	13	---	32	---	116	---	58	35	---
TOTAL	594	457	384	383	352	578	2374	6707	3767	2124	1543	852
MEAN	19.2	15.2	12.4	12.4	12.1	18.6	79.1	216	126	68.5	49.8	28.4
MAX	24	18	15	14	14	32	131	410	236	96	62	37
MIN	15	13	11	11	10	13	33	103	85	52	35	23
AC-FT	1180	906	762	760	698	1150	4710	13300	7470	4210	3060	1690

CAL YR 1983	TOTAL	17640.6	MEAN	48.3	MAX	365	MIN	5.2	AC-FT	34990
WTR YR 1984	TOTAL	20115	MEAN	55.0	MAX	410	MIN	10	AC-FT	39900

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to current year.
pH: December 1974 to September 1984, (discontinued).
WATER TEMPERATURE: December 1974 to current year.
DISSOLVED OXYGEN: December 1974 to September 1984, (discontinued).
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since December 1974.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Organic Fractionation analyses data are available in the Meeker sub-district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 micromhos June 21, 1976; minimum, 344 micromhos Apr. 13, 1976.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, 0.0°C many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 18,600 tons May 16, 1984; minimum daily, 0.02 ton Apr. 20, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
pH: Maximum 8.7 units several days Dec. to May; minimum, 8.1 units Jan.18, July 10, 31.
WATER TEMPERATURES: Maximum, 20.0°C July 7; 0.0°C many days during winter months.
DISSOLVED OXYGEN: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 17,800 mg/L May 16; minimum daily, 27 mg/L Oct. 6.
SEDIMENT LOADS: Maximum daily, 18,600 tons May 16; minimum daily, 1.5 ton Oct. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
NOV 09...	1310	16	988	8.5	5.0	10.4	2.0	27	1.1	100
APR 06...	1110	40	1090	8.6	9.0	9.5	1.4	--	--	--
MAY 24...	1055	209	856	8.5	8.5	8.5	--	74	1.5	K930
JUN 20...	0930	121	991	8.5	10.5	9.0	--	--	--	--
JUL 25...	0930	64	1020	8.5	13.0	7.6	--	--	--	--
SEP 12...	0910	44	1080	8.4	11.0	9.8	--	--	--	--

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV 09...	K240	270	370	72	45	110	3	2.5	353	<.5
APR 06...	--	--	380	78	45	120	3	2.6	319	--
MAY 24...	300	640	320	70	36	68	2	2.7	280	<.5
JUN 20...	--	--	380	78	45	85	2	2.1	249	--
JUL 25...	--	--	370	75	45	100	2	3.7	322	--
SEP 12...	--	--	380	73	48	100	2	2.3	327	--

K BASED ON NON-IDEAL COLONY COUNT.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV 09...	200	17	.80	<.01	14	670	.92	30	27	1.3
APR 06...	220	18	.70	--	13	690	.94	75	292	.93
MAY 24...	180	15	.40	.16	14	560	.75	313	2040	2.3
JUN 20...	210	13	.80	--	15	600	.81	196	283	2.2
JUL 25...	220	15	.60	--	14	670	.91	115	866	1.2
SEP 12...	220	15	.80	--	15	670	.91	80	57	2.1

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
NOV 09...	.060	.64	.70	.040	.010	4.7	.20	--	8	<1
APR 06...	.080	.42	.50	.260	.010	5.4	2.4	--	<1	--
MAY 24...	.030	.87	.90	1.10	.030	7.3	>8.0	<.01	<1	<1
JUN 20...	.040	.86	.90	.350	.020	6.7	1.9	--	<1	--
JUL 25...	.100	.80	.90	.550	.030	6.4	>4.2	--	1	--
SEP 12...	.040	.76	.80	.050	.010	5.8	.50	--	1	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 09...	<10	2	110	180	<1	<10	4	6
APR 06...	--	2	--	150	--	--	--	10
MAY 24...	20	2	110	80	<1	<10	5	7
JUN 20...	--	2	--	110	--	--	--	7
JUL 25...	--	3	--	140	--	--	--	20
SEP 12...	--	2	--	170	--	--	--	5

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 09...	2	24	42	<.1	6	2	1400	4
APR 06...	--	--	29	--	--	--	1100	--
MAY 24...	<1	26	12	<.1	8	5	910	6
JUN 20...	--	--	13	--	--	--	1200	--
JUL 25...	--	--	17	--	--	--	1200	--
SEP 12...	--	--	21	--	--	--	1400	--

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
NOV									
09...	1.2	<25	1.7	<10	1.7	<8.6	1.5	.03	3.4
MAY									
24...	--	16	92	<7.8	86	<6.7	74	.11	3.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
07...	1232	19	18	.93
NOV				
09...	1310	16	73	3.2
17...	1500	14	204	7.9
22...	1610	14	150	5.6
DEC				
01...	1615	14	128	4.7
07...	1430	13	120	4.1
20...	1400	11	193	5.6
JAN				
04...	1205	16	178	7.7
09...	1320	12	137	4.3
19...	1500	12	140	4.5
27...	1422	14	528	20
31...	1436	14	306	11
FEB				
21...	1455	16	319	14
MAR				
08...	1402	12	106	3.4
21...	1152	17	149	6.8
APR				
06...	1110	40	391	42
23...	1308	95	2110	541
MAY				
03...	1325	119	2450	787
11...	1120	265	9850	7050
14...	1040	396	15100	16100
15...	0920	411	17000	18900
16...	1015	391	14500	15300
24...	1055	209	5590	3150
JUN				
07...	1725	280	7200	5440
20...	0930	121	989	323
26...	1327	92	660	165
JUL				
25...	0930	64	998	172
SEP				
12...	0910	44	89	11

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	999	1050	1090	1020	1040	---	968	910	---	1040	
2	1020	1000	1060	1110	1020	1040	---	926	921	---	1070	
3	1010	996	1050	1150	---	1040	1100	895	915	---	---	
4	1030	990	1060	1040	---	1050	1100	932	917	---	---	
5	1020	997	1060	997	---	1070	1090	936	909	---	---	
6	1010	1010	1120	1010	---	1050	1090	924	---	---	---	
7	1010	1030	1110	---	1040	1040	1070	928	---	---	---	
8	1020	984	1070	1020	1150	1040	985	923	---	---	---	
9	1030	993	1070	1020	1150	1050	---	890	---	---	---	
10	1020	1020	1050	1040	1170	1040	914	833	---	---	---	
11	1000	1030	1070	1020	1180	1040	927	764	---	---	---	
12	994	1040	1070	---	1210	1040	974	729	---	---	---	
13	988	1040	1120	---	1200	1020	1000	719	---	---	---	
14	967	1030	1100	---	1180	1030	1000	688	---	---	---	
15	976	1040	1090	---	1190	1030	---	667	---	---	---	
16	984	1030	1100	1150	---	1040	---	675	---	---	---	
17	974	1040	1080	1130	---	1050	---	---	---	---	---	
18	995	1030	1110	1220	---	1050	---	---	---	---	---	
19	981	1040	1110	1150	---	1040	---	771	---	---	---	
20	974	1040	1050	1140	---	1050	---	---	---	---	---	
21	980	1030	1100	1130	1030	1040	903	---	---	---	---	
22	987	1040	1130	1070	1050	1050	941	---	---	---	---	
23	987	1060	1090	1050	1050	1070	911	---	---	---	---	
24	978	1050	---	1040	1060	1070	840	---	---	1070	---	
25	981	1040	1120	1010	1050	1090	---	862	---	1050	---	
26	987	1030	1090	---	1030	1100	---	876	---	1070	---	
27	978	1050	1100	1010	1110	1110	937	887	---	1070	---	
28	995	1050	1090	1020	1080	1100	942	886	---	1070	---	
29	982	1050	1110	1020	---	1040	964	892	---	1070	---	
30	985	1060	1080	1020	---	---	977	896	---	1050	---	
31	997	---	1070	1010	---	---	---	882	---	1040	---	
MEAN	996	1030	1090	1070	1100	1050	982	848	914	1060	1060	

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	8.4	8.5	8.4	8.4	8.3	8.6	8.4	8.6	8.3	8.5	8.5
2	8.5	8.4	8.5	8.4	8.4	8.3	8.6	8.3	8.5	8.3	8.6	8.5
3	8.5	8.3	8.5	8.4	8.4	8.3	8.6	8.3	---	---	8.6	8.5
4	8.4	8.3	8.5	8.4	8.4	8.4	8.7	8.3	---	---	8.7	8.6
5	8.4	8.3	8.5	8.4	8.4	8.4	8.3	8.3	---	---	8.7	8.6
6	8.4	8.3	8.5	8.4	8.5	8.4	8.3	8.3	---	---	8.6	8.5
7	8.5	8.3	8.5	8.4	8.4	8.3	---	---	8.7	8.5	8.6	8.5
8	8.5	8.3	8.5	8.3	8.4	8.3	8.3	8.3	8.5	8.5	8.6	8.5
9	8.5	8.3	8.6	8.5	8.4	8.3	8.5	8.4	8.6	8.5	8.6	8.5
10	8.5	8.3	8.5	8.4	8.3	8.3	8.5	8.4	8.5	8.4	8.6	8.4
11	8.5	8.3	8.5	8.4	8.4	8.3	8.7	8.4	8.6	8.5	8.6	8.5
12	8.5	8.3	8.5	8.4	8.4	8.3	---	---	8.6	8.5	8.6	8.5
13	8.5	8.3	8.5	8.4	8.4	8.4	---	---	8.5	8.4	8.6	8.4
14	8.5	8.3	8.5	8.4	8.4	8.4	---	---	8.5	8.4	8.6	8.4
15	8.5	8.4	8.5	8.4	8.4	8.4	---	---	8.5	8.4	8.6	8.4
16	8.5	8.4	8.5	8.4	8.4	8.4	8.2	8.2	8.6	8.4	8.6	8.4
17	8.5	8.3	8.5	8.2	8.4	8.3	8.3	8.2	8.5	8.4	8.6	8.4
18	8.5	8.3	8.3	8.2	8.4	8.3	8.2	8.1	8.5	8.5	8.5	8.4
19	8.5	8.3	8.3	8.3	8.4	8.3	8.4	8.3	8.5	8.4	8.6	8.5
20	8.5	8.4	8.3	8.3	8.4	8.3	8.5	8.4	8.5	8.4	8.6	8.4
21	8.5	8.4	8.4	8.3	8.3	8.3	8.5	8.4	8.5	8.2	8.6	8.3
22	8.5	8.3	8.4	8.3	8.3	8.3	8.5	8.5	8.6	8.5	8.6	8.5
23	8.5	8.4	8.4	8.3	8.3	8.3	8.5	8.5	8.6	8.5	8.6	8.5
24	8.5	8.4	8.4	8.3	---	---	8.6	8.5	8.6	8.5	8.6	8.5
25	8.5	8.4	8.3	8.3	8.3	8.3	8.6	8.5	8.6	8.5	8.6	8.5
26	8.5	8.4	8.4	8.3	8.4	8.3	---	---	8.6	8.5	8.6	8.6
27	8.4	8.4	8.4	8.3	8.3	8.3	8.7	8.5	8.6	8.5	8.6	8.6
28	8.5	8.4	8.4	8.3	8.6	8.3	8.7	8.6	8.6	8.5	8.6	8.5
29	8.5	8.4	8.4	8.3	---	---	8.7	8.6	---	---	8.6	8.5
30	8.5	8.4	8.4	8.3	8.6	8.2	8.7	8.6	---	---	---	---
31	8.5	8.4	---	---	8.7	8.3	8.7	8.5	---	---	---	---
MONTH	8.5	8.3	8.6	8.2	8.7	8.2	8.7	8.1	8.7	8.2	8.7	8.3

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.6	8.6	8.5	8.4	---	---	8.3	8.2	8.5	8.3
2	---	---	8.6	8.5	8.5	8.4	---	---	8.3	8.2	8.5	8.4
3	8.6	8.6	8.6	8.5	8.6	8.4	---	---	8.3	8.2	8.5	8.4
4	8.7	8.5	8.6	8.5	8.6	8.4	---	---	8.3	8.2	8.5	8.3
5	8.6	8.5	8.6	8.5	8.6	8.5	8.5	8.4	8.3	8.3	8.5	8.3
6	8.6	8.5	8.6	8.6	8.6	8.5	8.4	8.3	8.4	8.2	8.5	8.3
7	8.6	8.5	8.7	8.5	8.5	8.4	8.4	8.3	8.4	8.4	8.5	8.4
8	8.6	8.4	8.7	8.5	8.5	8.5	8.4	8.3	8.5	8.3	---	---
9	---	---	8.6	8.5	8.5	8.5	8.4	8.3	8.4	8.3	---	---
10	8.6	8.5	8.6	8.4	8.6	8.4	8.4	8.1	8.4	8.4	---	---
11	8.6	8.5	8.5	8.4	8.6	8.4	8.4	8.3	8.5	8.4	---	---
12	8.6	8.5	8.5	8.4	8.6	8.4	8.4	8.4	8.4	8.4	---	---
13	8.6	8.5	8.5	8.4	8.5	8.4	---	---	8.4	8.3	---	---
14	8.6	8.5	8.5	8.2	8.6	8.4	---	---	8.4	8.3	---	---
15	---	---	8.4	8.3	8.5	8.4	---	---	8.4	8.4	---	---
16	---	---	8.5	8.3	8.5	8.5	---	---	8.4	8.4	---	---
17	---	---	---	---	8.6	8.4	---	---	8.4	8.4	8.4	8.3
18	---	---	---	---	8.6	8.4	---	---	8.4	8.4	8.4	8.3
19	---	---	---	---	8.5	8.4	---	---	8.5	8.4	8.4	8.3
20	---	---	---	---	8.5	8.4	---	---	8.4	8.3	8.4	8.3
21	8.6	8.5	---	---	8.5	8.4	---	---	8.5	8.3	8.4	8.3
22	8.6	8.5	---	---	8.5	8.4	---	---	8.5	8.4	8.4	8.3
23	8.6	8.5	---	---	8.5	8.4	---	---	8.5	8.4	8.4	8.3
24	8.6	8.5	---	---	8.5	8.4	8.4	8.3	8.5	8.4	8.4	8.3
25	---	---	8.5	8.3	8.5	8.4	8.4	8.2	8.5	8.4	8.5	8.3
26	---	---	8.5	8.3	8.5	8.4	8.3	8.2	8.5	8.4	8.4	8.4
27	8.6	8.5	8.4	8.3	8.5	8.4	8.3	8.2	8.5	8.3	8.4	8.3
28	8.7	8.6	8.4	8.3	8.5	8.4	8.3	8.2	8.5	8.4	8.4	8.4
29	8.7	8.6	8.4	8.2	8.5	8.3	8.3	8.2	8.5	8.3	8.5	8.3
30	8.6	8.6	8.4	8.2	---	---	8.3	8.2	8.5	8.3	8.5	8.3
31	---	---	8.5	8.3	---	---	8.3	8.1	8.5	8.3	---	---
MONTH	8.7	8.4	8.7	8.2	8.6	8.3	8.5	8.1	8.5	8.2	8.5	8.3
YEAR	8.7	8.1										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	8.5	11.0	6.0	5.0	2.5	2.0	.0	3.0	.5	7.5	5.0
2	10.5	7.5	10.0	5.5	6.0	4.0	.0	.0	---	---	9.5	2.0
3	9.0	6.5	9.5	4.0	4.0	1.0	.0	.0	---	---	8.5	3.0
4	13.5	6.0	9.5	3.5	4.0	1.5	1.0	.0	---	---	5.5	.5
5	14.0	6.0	8.5	4.0	3.0	.0	2.5	.5	---	---	4.0	.5
6	14.0	6.5	9.0	3.5	1.5	.0	2.5	.5	---	---	6.5	.5
7	12.0	6.5	10.0	4.5	4.0	.0	---	---	3.5	3.0	8.0	.5
8	12.0	6.0	8.5	3.5	5.0	2.5	3.5	.5	6.0	2.5	9.0	.5
9	14.0	8.0	6.0	2.0	4.5	1.5	3.5	.5	5.0	.5	7.0	2.0
10	11.5	8.0	8.0	3.0	5.0	3.0	.5	.5	7.0	1.5	9.0	1.5
11	11.5	3.5	7.5	4.0	4.5	1.5	2.0	.5	4.0	.5	8.5	3.5
12	11.5	4.5	8.0	5.0	4.5	2.5	---	---	4.0	.5	8.0	2.0
13	12.0	5.0	8.0	4.5	3.5	1.0	---	---	7.0	2.5	10.0	2.0
14	8.5	7.0	6.5	3.0	3.0	.0	---	---	6.5	3.0	7.0	4.0
15	9.5	5.0	6.5	1.5	3.5	.0	---	---	6.5	1.5	10.0	3.0
16	9.5	4.0	6.0	1.5	1.5	.0	---	---	6.0	.5	9.0	4.5
17	10.5	4.0	6.5	3.0	4.0	1.5	.5	.5	3.5	1.5	9.0	2.5
18	11.5	7.5	5.5	3.5	3.5	1.0	.5	.5	4.5	.5	5.0	2.5
19	10.5	4.5	5.5	2.5	4.0	1.5	.5	.5	3.0	.5	10.5	.5
20	10.5	3.0	5.5	3.5	1.5	.0	.5	.5	2.0	.5	12.0	1.5
21	11.0	4.0	5.0	3.0	.0	.0	.5	.5	4.0	.5	12.0	3.0
22	11.0	4.0	3.5	.5	.0	.0	.5	.5	5.5	.5	7.5	3.5
23	11.0	4.0	1.5	.0	.0	.0	.5	.5	5.0	.5	10.0	4.0
24	7.0	4.5	3.5	.5	---	---	1.0	.5	4.5	.5	12.0	2.0
25	10.0	3.0	5.0	3.0	.0	.0	1.5	.5	4.0	1.0	8.5	3.5
26	10.0	3.5	3.0	.5	3.0	.0	---	---	5.5	.5	6.5	3.0
27	7.5	3.5	3.0	.0	4.0	2.5	3.0	.5	---	---	8.5	3.0
28	10.0	7.5	4.5	.5	2.0	.0	3.5	.5	---	---	10.0	2.5
29	10.0	4.0	3.5	1.0	.0	.0	3.5	.5	---	---	11.5	3.0
30	9.5	4.5	4.0	.0	.5	.0	1.5	.5	---	---	---	---
31	10.0	6.0	---	---	4.0	.0	2.0	.5	---	---	---	---
MONTH	15.0	3.0	11.0	.0	6.0	.0	3.5	.0	7.0	.5	12.0	.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.0	5.5	12.0	9.5	---	---	16.0	11.0	17.5	11.5
2	---	---	10.5	5.5	17.0	7.5	---	---	17.5	10.5	17.5	8.5
3	9.5	4.5	10.5	5.0	15.5	9.0	---	---	18.0	10.5	18.0	8.0
4	13.5	1.5	11.0	5.0	15.0	8.0	---	---	18.5	11.0	18.5	8.5
5	13.5	3.0	10.5	5.0	11.0	9.0	19.5	10.5	16.5	11.0	18.5	9.0
6	12.0	5.0	9.5	5.5	9.5	6.5	19.5	9.5	17.5	11.0	18.0	10.0
7	10.5	5.0	11.0	3.5	12.5	4.5	20.0	10.5	19.0	10.5	---	---
8	11.5	2.0	14.0	3.5	10.0	6.5	18.5	11.5	19.5	10.0	---	---
9	---	---	13.5	5.0	11.0	6.0	18.5	11.5	19.5	9.5	---	---
10	8.0	4.0	14.5	5.5	15.0	6.0	19.5	10.5	19.5	10.0	---	---
11	7.0	2.0	14.5	6.5	16.5	8.0	19.0	10.0	18.5	10.0	---	---
12	9.5	.5	12.5	7.0	17.0	7.5	---	---	17.5	11.0	---	---
13	11.5	4.0	13.5	6.0	17.0	8.0	---	---	15.5	10.5	---	---
14	12.5	2.0	15.0	7.0	18.0	8.5	---	---	19.5	11.0	---	---
15	---	---	13.5	7.5	16.5	10.5	---	---	16.0	11.0	---	---
16	---	---	14.5	6.5	14.5	9.5	---	---	18.0	12.0	---	---
17	---	---	---	---	16.5	9.0	---	---	17.5	12.0	---	---
18	---	---	---	---	15.5	8.5	---	---	19.0	11.5	18.0	9.0
19	---	---	12.0	7.0	17.0	8.0	---	---	18.0	11.5	14.5	9.5
20	---	---	---	---	18.5	10.0	---	---	14.5	12.0	15.5	8.5
21	8.0	2.5	---	---	18.0	9.0	---	---	16.0	11.0	16.5	10.5
22	9.5	3.0	---	---	18.0	8.0	---	---	18.0	10.0	15.5	9.5
23	12.5	4.0	---	---	18.5	8.5	---	---	15.0	11.0	16.5	8.5
24	10.5	6.0	---	---	18.5	8.5	---	---	16.0	11.0	12.0	7.5
25	---	---	15.5	11.5	15.0	10.5	19.0	12.0	15.5	10.0	13.5	5.5
26	---	---	16.0	7.5	17.5	13.0	18.0	11.5	18.0	9.5	11.0	6.0
27	10.0	6.0	16.0	7.5	19.0	9.5	17.0	11.5	18.5	9.5	13.5	6.5
28	8.0	2.0	16.0	6.5	19.5	9.5	18.5	11.0	18.5	9.5	12.5	6.0
29	9.0	3.5	17.0	7.5	19.5	10.0	19.5	11.5	19.0	9.5	12.5	4.0
30	10.0	5.0	17.0	7.5	---	---	18.0	12.0	19.0	9.0	13.0	4.0
31	---	---	13.0	9.5	---	---	17.5	11.0	19.0	10.5	---	---
MONTH	13.5	.5	17.0	3.5	19.5	4.5	20.0	9.5	19.5	9.0	18.5	4.0
YEAR	20.0	.0										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	11.2	10.3	---	---	10.2	9.3	11.3	10.7
2	---	---	---	---	---	---	---	---	10.7	8.8	12.1	10.0
3	10.7	9.1	---	---	---	---	---	---	---	---	11.6	10.2
4	12.0	7.7	9.8	8.7	---	---	12.4	11.0	---	---	11.9	11.1
5	11.6	7.3	11.2	8.8	---	---	12.1	10.7	---	---	12.3	11.2
6	11.1	5.7	11.1	8.3	---	---	11.2	9.7	---	---	12.7	10.8
7	10.2	6.5	10.3	7.4	10.3	10.1	---	---	---	---	12.4	10.5
8	10.3	6.6	10.1	7.7	10.8	9.1	---	---	10.6	9.1	12.0	10.0
9	---	---	11.2	9.9	10.0	8.1	11.9	11.4	10.1	8.7	11.9	10.6
10	---	---	10.9	8.2	---	---	12.0	10.2	---	---	12.2	10.0
11	10.2	7.2	---	---	---	---	10.3	9.4	---	---	11.4	10.1
12	10.7	7.4	---	---	---	---	---	---	---	---	11.7	10.0
13	10.3	7.9	---	---	---	---	---	---	---	---	12.5	10.2
14	9.8	8.0	---	---	---	---	---	---	---	---	12.0	11.0
15	9.5	6.9	---	---	---	---	---	---	---	---	12.5	10.3
16	---	---	---	---	---	---	---	---	10.5	9.8	12.0	10.8
17	---	---	11.5	9.9	---	---	---	---	11.6	10.0	12.6	10.5
18	---	---	11.0	9.2	---	---	---	---	12.2	11.2	12.3	11.4
19	---	---	---	---	---	---	---	---	12.4	11.6	12.8	10.2
20	---	---	---	---	10.6	8.5	---	---	12.5	11.6	12.6	9.7
21	---	---	---	---	10.9	10.5	---	---	12.1	11.0	11.6	9.2
22	---	---	11.7	11.0	10.4	9.8	---	---	11.9	10.4	11.2	10.2
23	---	---	12.7	11.1	9.9	9.7	---	---	11.7	10.3	11.5	9.5
24	---	---	---	---	---	---	10.4	10.0	11.5	10.1	11.6	9.1
25	---	---	---	---	---	---	10.4	9.3	10.7	10.0	10.9	9.6
26	---	---	---	---	---	---	---	---	10.9	9.8	11.0	9.7
27	---	---	---	---	---	---	10.2	9.9	10.5	10.0	11.0	9.7
28	10.3	8.2	---	---	---	---	10.7	9.9	10.0	9.8	11.0	9.5
29	10.5	7.8	12.1	11.1	11.4	8.8	10.8	9.9	---	---	11.4	9.4
30	9.8	7.1	13.0	10.3	---	---	11.0	10.6	---	---	---	---
31	---	---	---	---	---	---	10.9	9.7	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.8	9.8	9.1	8.4	---	---	9.2	8.0	---	---
2	---	---	10.7	9.6	9.3	7.4	---	---	9.0	8.0	---	---
3	11.7	11.1	10.8	9.6	9.0	7.6	---	---	9.1	7.8	---	---
4	12.9	9.6	10.9	9.5	9.1	7.5	---	---	8.8	7.6	8.8	7.8
5	11.9	9.2	10.7	9.4	8.8	8.4	10.1	7.7	8.8	7.8	9.5	7.7
6	11.0	9.3	10.6	9.5	9.3	8.6	9.4	7.6	9.2	7.6	9.1	7.5
7	10.9	9.6	11.0	9.6	9.6	8.0	9.2	7.6	8.8	7.4	9.0	8.1
8	11.7	9.3	11.6	8.7	9.3	8.6	8.8	7.9	9.0	7.5	---	---
9	---	---	10.7	8.4	9.4	8.4	8.9	7.7	9.1	7.4	---	---
10	11.1	10.1	10.3	8.2	9.4	7.6	9.0	7.5	8.9	7.3	---	---
11	11.8	10.4	10.1	8.6	9.1	7.5	9.1	7.4	8.8	7.2	---	---
12	12.5	10.0	10.1	8.7	9.3	8.0	9.1	8.2	8.4	7.1	---	---
13	11.7	9.8	10.2	8.3	10.2	8.1	---	---	---	---	---	---
14	12.3	9.6	10.6	8.5	9.8	7.9	---	---	---	---	---	---
15	---	---	10.5	9.0	9.2	7.9	---	---	---	---	---	---
16	---	---	10.7	8.8	9.3	8.2	---	---	---	---	---	---
17	---	---	---	---	9.4	7.9	---	---	---	---	8.1	7.5
18	---	---	---	---	9.4	7.9	---	---	---	---	9.3	7.3
19	---	---	---	---	9.3	7.8	---	---	---	---	9.0	7.7
20	---	---	---	---	9.1	7.4	---	---	---	---	8.8	7.3
21	12.1	10.4	---	---	9.0	7.3	---	---	8.4	7.6	---	---
22	11.8	10.0	---	---	9.2	7.2	---	---	9.0	7.6	---	---
23	11.6	9.5	---	---	9.0	7.1	---	---	8.9	8.0	---	---
24	10.8	9.5	---	---	8.9	7.1	8.9	8.5	8.7	7.7	---	---
25	---	---	10.7	9.2	8.4	7.5	9.5	8.4	8.8	7.7	---	---
26	---	---	10.5	8.4	9.5	7.9	9.6	8.4	8.8	7.2	9.3	8.7
27	10.8	9.6	10.2	8.2	10.2	7.9	9.5	8.5	---	---	9.9	8.3
28	11.8	10.3	10.1	7.9	9.4	7.8	9.6	8.2	---	---	10.0	8.5
29	11.4	9.9	9.7	7.4	9.4	7.6	9.5	8.2	---	---	10.3	8.3
30	11.0	9.7	9.3	7.1	---	---	9.2	8.3	---	---	10.1	8.1
31	---	---	9.1	8.0	---	---	9.3	7.9	---	---	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	15	70	2.8	18	---	3.2	13	128	4.5
2	17	55	2.5	17	---	3.0	14	---	4.9
3	19	55	2.8	17	---	3.0	13	---	4.6
4	20	40	2.2	16	---	2.8	14	---	4.9
5	20	30	1.6	16	---	2.8	13	---	4.6
6	20	27	1.5	15	---	2.8	15	---	5.6
7	20	35	1.9	15	---	2.8	12	120	3.9
8	19	---	1.8	18	---	3.2	13	---	4.2
9	18	---	1.7	17	73	3.4	12	---	3.9
10	18	---	1.7	16	---	3.9	13	---	4.2
11	17	---	1.6	16	---	4.5	13	---	4.2
12	17	---	1.8	17	---	5.5	13	---	4.2
13	18	---	1.9	16	---	5.8	13	---	4.6
14	24	---	2.6	16	---	6.5	13	---	4.6
15	24	---	2.6	15	---	6.7	13	---	4.6
16	21	---	2.5	15	---	7.3	13	---	6.3
17	20	---	2.4	15	204	8.3	12	---	4.9
18	19	---	2.3	15	---	8.1	12	---	4.9
19	18	---	2.2	15	---	7.5	12	---	4.9
20	18	---	2.5	15	---	6.9	12	193	6.3
21	18	---	2.5	15	---	6.3	12	---	8.1
22	20	---	2.7	14	150	5.7	12	---	6.5
23	20	---	2.7	15	---	6.9	12	---	6.5
24	19	---	2.8	13	---	5.3	11	---	5.9
25	19	---	2.8	14	---	5.5	11	---	5.9
26	20	---	2.9	14	---	5.3	11	---	5.6
27	20	---	2.9	13	---	4.9	11	---	5.6
28	19	---	3.0	13	---	4.7	12	---	6.5
29	19	---	3.0	13	---	4.7	12	---	6.2
30	19	---	3.0	13	---	4.7	11	---	5.3
31	19	---	3.0	---	---	---	11	---	5.3
TOTAL	594	---	74.2	457	---	152.0	384	---	162.2
		JANUARY			FEBRUARY			MARCH	
1	11	---	5.3	13	240	8.4	13	150	5.3
2	12	---	5.8	13	220	7.7	13	---	4.6
3	12	---	6.5	13	240	8.4	13	---	4.6
4	14	178	6.7	13	220	7.7	13	---	4.6
5	14	---	6.0	13	---	8.0	14	---	5.0
6	13	---	5.3	14	---	8.5	13	---	4.6
7	12	---	4.8	12	220	7.1	13	---	4.6
8	12	---	4.5	10	160	4.3	13	132	4.6
9	12	137	4.4	11	160	4.8	13	86	3.0
10	12	---	5.8	10	---	4.0	13	79	2.8
11	11	---	4.4	11	---	4.4	14	80	3.0
12	11	---	4.2	13	---	5.6	14	90	3.4
13	12	---	5.2	11	---	4.3	14	110	4.2
14	12	---	4.5	11	---	4.0	15	155	6.3
15	12	---	4.5	11	---	3.6	16	190	8.2
16	12	---	5.2	12	168	5.4	16	235	10
17	12	---	4.5	11	161	4.8	17	185	8.5
18	12	---	4.5	12	147	4.8	19	205	11
19	12	140	4.5	13	168	5.9	16	165	7.1
20	12	---	4.5	12	---	5.4	16	132	5.7
21	13	---	4.9	12	210	6.8	20	248	13
22	13	---	4.9	12	---	6.8	22	295	18
23	13	---	4.9	12	210	6.8	21	256	15
24	13	---	4.9	13	---	7.4	23	386	24
25	13	---	7.0	12	---	5.4	27	602	44
26	13	---	9.6	12	---	5.4	27	---	47
27	13	340	12	13	---	7.4	29	634	50
28	13	260	9.1	13	---	7.4	28	607	46
29	12	200	6.5	14	---	8.0	30	648	52
30	12	240	7.8	---	---	---	31	387	32
31	13	260	9.1	---	---	---	32	369	32
TOTAL	383	---	181.8	352	---	178.5	578	---	484.1

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	33	294	26	103	3100	862	116	3600	1130
2	34	345	32	116	4100	1280	107	4800	1390
3	34	---	25	118	2500	796	99	3200	855
4	34	282	26	123	3220	1070	97	2100	550
5	37	278	28	138	---	2200	96	2300	596
6	40	352	38	146	---	2300	98	2400	635
7	44	510	61	146	---	1850	236	9190	6210
8	54	1650	241	154	3400	1410	214	4840	2800
9	70	5900	1120	179	4300	2080	197	3630	1930
10	60	3100	502	213	6700	3850	183	2530	1250
11	61	2350	387	268	9900	7160	171	2090	965
12	56	2100	318	334	12400	11200	165	2090	931
13	56	1680	254	381	12400	12800	157	1870	793
14	57	1450	223	396	13900	14900	148	1430	571
15	62	1380	231	410	17000	18800	139	1540	578
16	79	4300	930	387	17800	18600	135	1450	529
17	97	5870	1600	335	15800	14300	130	1400	491
18	121	7100	2390	285	14300	11000	124	1200	402
19	131	---	2600	265	10500	7510	116	1050	329
20	125	---	2280	254	9000	6170	110	855	254
21	103	---	1100	243	7750	5080	105	742	210
22	94	---	800	231	9250	5770	101	742	202
23	99	2540	685	219	---	4580	98	675	179
24	113	3070	940	206	6250	3480	92	630	156
25	131	4880	1730	195	9500	5000	92	540	134
26	125	2110	715	180	6500	3160	93	540	136
27	113	2090	637	164	6750	2990	90	544	132
28	109	2600	765	146	5000	1970	87	520	122
29	102	1700	468	133	4000	1440	86	528	123
30	100	---	540	123	4000	1330	85	512	118
31	---	---	---	116	4800	1500	---	---	---
TOTAL	2374	---	21692	6707	---	176438	3767	---	24701
		JULY			AUGUST			SEPTEMBER	
1	89	660	159	60	3350	550	37	320	32
2	85	536	123	61	3200	527	37	312	31
3	86	520	121	59	2000	319	35	144	14
4	88	520	124	62	800	134	34	140	13
5	90	---	515	57	520	80	32	180	16
6	96	528	137	59	520	83	31	88	7.4
7	84	340	77	60	360	58	30	144	12
8	79	320	68	57	340	52	30	160	13
9	79	360	77	56	256	39	30	144	12
10	89	12500	3620	54	360	52	29	144	11
11	72	1400	272	52	536	75	28	176	13
12	68	920	169	52	640	90	28	132	10
13	67	816	148	51	400	55	28	112	8.5
14	68	640	118	52	100	14	27	112	8.2
15	66	440	78	49	80	11	26	124	8.7
16	63	400	68	49	160	21	29	188	15
17	61	360	59	51	420	58	30	200	16
18	60	240	39	47	200	25	28	120	9.1
19	58	200	31	47	200	25	27	144	10
20	56	240	36	52	960	135	27	204	15
21	54	224	33	51	440	61	27	136	9.9
22	52	176	25	46	480	60	26	104	7.3
23	55	560	83	44	280	33	25	80	5.4
24	57	992	153	43	200	23	25	68	4.6
25	58	5610	900	43	220	26	25	76	5.1
26	56	6190	935	42	176	20	25	88	5.9
27	57	6400	985	40	180	19	25	80	5.4
28	56	3200	484	39	160	17	24	56	3.6
29	58	800	125	37	120	12	24	64	4.1
30	59	1440	229	36	112	11	23	48	3.0
31	58	3300	530	35	156	15	---	---	---
TOTAL	2124	---	10521	1543	---	2700	852	---	329.2
YEAR	20115		237614.0						

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi upstream from mouth, about 300 ft above mouth of West Fork Stewart Gulch, and 14.2 mi west of Rio Blanco.

DRAINAGE AREA.--44.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR CO-77-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,430 ft, from topographic map.

REMARKS.--Records good. Diversion immediately upstream from gage for irrigation of about 20 acres of grassland.

AVERAGE DISCHARGE.--10 years, 1.86 ft³/s; 1,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s, July 19, 1977, gage height, 4.05 ft; no flow, Aug. 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13 ft³/s at 1600 Aug. 1, gage height, 3.40 ft; minimum daily, 0.05 ft³/s, July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.1	4.1	3.6	3.2	3.5	3.2	2.3	2.8	2.5	6.6	4.2
2	3.0	2.1	4.0	3.6	3.2	3.6	3.2	2.4	2.9	.07	6.3	4.2
3	3.0	2.0	4.0	3.6	3.2	3.5	3.2	2.4	3.1	2.5	6.3	4.4
4	2.8	2.0	4.0	3.5	3.2	3.5	3.1	2.3	3.1	4.5	6.4	6.7
5	2.7	2.1	3.9	3.5	3.2	3.5	3.1	2.4	3.5	4.6	6.3	7.8
6	2.5	2.1	3.8	3.5	3.2	3.3	3.1	2.4	4.2	4.8	6.4	7.7
7	2.4	2.2	3.8	3.5	3.2	3.3	3.1	2.4	5.7	4.7	6.4	7.8
8	2.4	2.6	3.9	3.5	3.2	3.5	3.0	2.3	4.5	4.7	6.4	7.6
9	2.4	2.4	3.9	3.5	3.2	3.3	3.0	2.2	4.7	5.0	6.4	7.5
10	2.4	2.4	3.8	3.5	3.2	3.5	3.0	2.2	4.7	5.0	6.4	7.5
11	2.4	2.4	3.9	3.5	3.2	3.3	3.0	2.1	4.9	5.0	6.4	7.5
12	2.4	2.5	4.0	3.5	3.2	3.6	2.9	2.1	5.1	5.3	6.6	7.3
13	2.4	2.6	4.1	3.5	3.2	3.8	2.8	2.2	5.4	5.5	6.9	6.7
14	2.6	2.4	4.1	3.5	3.3	3.8	2.8	2.1	5.4	5.0	4.4	6.6
15	2.4	2.3	4.0	3.5	3.2	3.8	2.7	2.0	5.7	5.0	2.6	6.5
16	2.4	2.5	4.0	3.5	3.2	3.7	2.7	2.0	5.7	5.0	3.0	6.6
17	2.4	2.3	4.1	3.3	3.2	3.8	2.7	2.0	5.9	5.1	3.4	6.4
18	2.3	2.3	4.0	3.3	3.2	3.8	2.6	2.0	6.5	5.1	3.4	6.4
19	2.2	2.4	3.8	3.3	3.2	3.7	2.5	2.0	3.1	5.1	3.5	6.4
20	2.2	2.3	3.8	3.2	3.2	3.8	2.5	2.0	1.3	5.2	3.7	6.4
21	2.2	2.4	3.8	3.2	3.5	3.6	2.5	2.1	2.8	5.2	3.8	6.3
22	2.2	2.4	3.7	3.2	3.5	3.4	2.3	2.1	5.3	5.2	3.6	6.2
23	2.2	2.4	3.6	3.2	3.5	3.4	2.3	2.0	5.0	5.2	3.6	6.1
24	2.2	2.3	3.5	3.2	3.5	3.5	2.3	2.0	5.0	5.2	3.7	6.2
25	2.2	2.4	3.5	3.2	3.5	3.5	2.4	2.0	5.1	5.3	3.7	6.2
26	2.2	2.3	3.3	3.2	3.5	3.5	2.3	2.0	4.9	5.3	3.8	6.1
27	2.1	2.4	3.6	3.2	3.5	3.5	2.2	2.0	5.0	5.4	3.8	6.2
28	2.1	2.4	3.6	3.2	3.5	3.4	2.2	2.1	5.1	5.4	3.9	6.2
29	2.1	2.4	3.6	3.2	3.5	3.3	2.2	2.3	4.1	5.4	4.0	6.0
30	2.1	3.0	3.6	3.2	---	3.3	2.3	2.3	3.5	5.5	4.0	5.9
31	2.1	---	3.6	3.2	---	3.2	---	2.6	---	5.5	4.0	---
TOTAL	73.9	70.4	118.4	104.6	95.6	109.2	81.2	67.3	134.0	148.27	149.7	193.6
MEAN	2.38	2.35	3.82	3.37	3.30	3.52	2.71	2.17	4.47	4.78	4.83	6.45
MAX	3.0	3.0	4.1	3.6	3.5	3.8	3.2	2.6	6.5	5.5	6.9	7.8
MIN	2.1	2.0	3.3	3.2	3.2	3.2	2.2	2.0	1.3	.07	2.6	4.2
AC-FT	147	140	235	207	190	217	161	133	266	294	297	384

CAL YR 1983 TOTAL 1033.59 MEAN 2.83 MAX 9.4 MIN .10 AC-FT 2050
WTR YR 1984 TOTAL 1346.17 MEAN 3.68 MAX 7.8 MIN .07 AC-FT 2670

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1982.
pH: October 1974 to March 1982.
WATER TEMPERATURE: October 1974 to September 1982.
DISSOLVED OXYGEN: October 1974 to March 1982.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 micromhos Nov. 10, 1975; minimum, 583 micromhos Feb. 22, 1982.
pH: Maximum, 8.9 units Dec. 9, 11, 1979; minimum, 7.6 units Oct. 7, 1975.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.0°C Jan. 9, Dec. 17, 1977, Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/L June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV												
10...	1055	2.4	1320	8.1	8.0	13.1	2.6	12	520	86	73	120
APR												
06...	0930	3.1	1300	8.4	10.0	9.9	2.5	--	520	91	70	120
MAY												
23...	1015	2.0	1300	8.5	13.0	9.3	1.9	13	500	86	68	120
JUN												
21...	0945	5.0	1340	8.4	12.0	8.9	--	--	530	90	73	130
JUL												
25...	0900	5.6	1320	8.3	10.0	10.2	--	--	510	84	72	130
SEP												
12...	0850	6.3	1320	8.1	9.0	10.0	--	--	510	87	70	120

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV												
10...	2	1.4	424	<.5	340	7.1	.30	<.01	14	900	1.2	5.8
APR												
06...	2	1.2	365	--	350	7.3	.20	--	14	880	1.2	7.3
MAY												
23...	2	1.2	379	<.5	360	7.4	.20	.02	15	890	1.2	4.8
JUN												
21...	3	1.1	324	--	370	8.6	.30	--	15	890	1.2	12
JUL												
25...	3	1.7	389	--	340	7.7	.30	--	15	890	1.2	13
SEP												
12...	2	1.3	412	--	340	7.8	.30	--	16	890	1.2	15

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
NOV												
10...	10	1.8	.050	.75	.80	.010	.010	2.0	.20	<.01	4	<1
APR												
06...	34	1.7	.050	.75	.80	.070	.010	4.6	.50	--	<1	--
MAY												
23...	30	1.7	.040	.16	.20	.060	.030	2.8	--	<.01	<1	1
JUN												
21...	286	2.6	.030	.67	.70	.020	<.010	--	3.0	--	<1	--
JUL												
25...	24	1.9	.020	.68	.70	.020	.010	6.5	.40	--	1	--
SEP												
12...	8	2.7	.020	.68	.70	.010	.010	2.9	--	--	<1	--

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV 10...	10	1	51	80	<1	<10	1	6
APR 06...	--	<1	--	80	--	--	--	8
MAY 23...	<10	<1	49	80	<1	<10	3	5
JUN 21...	--	2	--	80	--	--	--	5
JUL 25...	--	1	--	80	--	--	--	5
SEP 12...	--	<1	--	80	--	--	--	<3

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 10...	<1	30	2	<.1	<2	1	2700	4
APR 06...	--	--	13	--	--	--	2700	--
MAY 23...	<1	21	12	<.1	3	<1	2600	19
JUN 21...	--	--	7	--	--	--	2800	--
JUL 25...	--	--	13	--	--	--	2800	--
SEP 12...	--	--	7	--	--	--	2700	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
NOV 10...	<32	<.4	<12	<.4	<10	<.4	.09	3.2
MAY 23...	<19	<.5	<11	.9	<9.8	.8	.37	3.2

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
APR 23...	1130	2.3	1200	14.0	JUN 26...	1055	5.0	1370	14.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 10...	1055	2.4	15	.10	JUL 25...	0900	5.6	41	.62
APR 06...	0930	3.1	89	.74	SEP 12...	0850	6.3	28	.48
MAY 23...	1015	2.0	109	.59					

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'30", long 108°11'54", in NW¼NW¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 1,400 ft upstream from mouth and 14.8 mi west of Rio Blanco.

DRAINAGE AREA.--3.62 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and 1 ft trapezoidal supercritical-flow flume. Altitude of gage is 6,372 ft, from topographic map. Prior to April 23, 1981, at site 300 ft downstream at datum 6.68 ft, lower.

REMARKS.--Records good except for periods of flow, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 207 ft³/s, Aug. 24, 1984, gage height, 11.43 ft, from theoretical rating for a 1 ft trapezoidal supercritical-flow flume; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 207 ft³/s at 1500 Aug. 24, gage height, 11.43 ft, from theoretical rating for a 1 ft trapezoidal supercritical-flow flume; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	1.8	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.25	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	4.4	.00	.00	.00
8	.00	.83	.00	.00	.00	.00	.00	.00	.20	.00	.00	.00
9	.00	.06	.00	.00	.00	.00	.02	.00	.00	.38	.00	.00
10	.00	.00	.00	.00	.00	.00	.01	.00	.00	.07	.00	.00
11	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.65	.00	.00	.03	.00	.00	.00
16	.00	.00	.00	.00	.00	.35	.00	.00	.46	.00	.47	.00
17	.00	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	.00
20	.00	.00	.00	.00	.00	.24	.00	.00	.00	.00	.35	.00
21	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	2.5	.00
25	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.69	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	1.9	---	.00	.00	---
TOTAL	.00	.89	.00	.00	.00	2.36	.75	1.90	5.40	.45	6.12	.00
MEAN	.00	.03	.00	.00	.00	.08	.02	.06	.18	.01	.20	.00
MAX	.00	.83	.00	.00	.00	.65	.69	1.9	4.4	.38	2.5	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	1.8	.00	.00	.00	4.7	1.5	3.8	11	.9	12	.00

CAL YR 1983 TOTAL 19.69 MEAN .05 MAX 5.2 MIN .00 AC-FT 39
WTR YR 1984 TOTAL 17.87 MEAN .05 MAX 4.4 MIN .00 AC-FT 35

09306036 SORGHUM GULCH AT MOUTH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1981. Pumping sediment sampler October 1974 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 8,020 mg/L Sept. 3, 1977; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 424 tons Sept. 3, 1977; no flow many days during each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
31...	1420	1.9	360	9.5	410	110	33	7.7	38	2	2.0

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)
MAY											
31...	84	<5.0	96	9.2	.20	<.01	6.8	240	.33	1.3	9860

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)
MAY											
31...	.68	.190	1.7	1.9	.550	.110	26	>16	<.01	11	<1

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
MAY								
31...	30	2	110	40	<1	10	7	52

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
MAY								
31...	<1	10	240	<.1	3	<1	550	9

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
MAY								
31...	<6.5	1500	8.9	1100	7.7	910	.17	.9

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'36", long 108°12'25", in SW¼SE¼ sec.31, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 800 ft upstream from mouth and 15.4 mi west of Rio Blanco.

DRAINAGE AREA.--1.20 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,353 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 514 ft^3/s, Aug. 16, 1984, gage height, 3.96 ft, from rating curve extended above 3.8 ft^3/s, on basis of slope area measurements at gage heights, 2.69 ft, and 3.96 ft; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 514 ft^3/s at 1315 Aug. 16, gage height, 3.96 ft, from rating curve extended above 3.8 ft^3/s, on basis of slope area measurements at gage heights 2.69 ft and 3.96 ft; no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00
8	.00	.00	.00	.00	.00	.17	.00	.00	.05	.00	.00	.00
9	.00	.00	.00	.00	.00	.01	.00	.00	.01	.10	.00	.00
10	.00	.00	.00	.00	.00	.04	.00	.00	.00	.02	.00	.00
11	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.05	.00	.00	.12	.00	18	.00
17	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.59	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.54	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.92	.00	.54	1.45	.12	18.73	.00
MEAN	.00	.00	.00	.00	.00	.03	.00	.02	.05	.00	.60	.00
MAX	.00	.00	.00	.00	.00	.17	.00	.54	1.2	.10	18	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	1.8	.00	1.1	2.9	.2	37	.00

CAL YR 1983 TOTAL 8.47 MEAN .02 MAX 2.4 MIN .00 AC-FT 17
WTR YR 1984 TOTAL 21.76 MEAN .06 MAX 18 MIN .00 AC-FT 43

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

PERIOD OF RECORD:--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1981.
WATER TEMPERATURE: April 1974 to September 1981.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 tp September 1981.

INSTRUMENTATION:--Water-quality monitor April 1974 to September 1981. Automatic pumping sediment sampler April 1974 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos Mar. 24, 1976; minimum, 124 micromhos Mar. 27, 1976.
WATER TEMPERATURES: Maximum, 25.0°C Mar. 24, 1976; minimum, 0.0°C many days each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 62,000 mg/L estimated Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 200 tons estimated Sept. 3, 1977; no flow many days each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
MAY												
31...	1455	.84	320	8.3	9.0	730	120	30	9.9	28	1	1.9

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
MAY											
31...	98	<2.0	60	7.1	.20	<.01	8.0	200	.28	.46	2770

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
MAY											
31...	.58	.150	1.2	1.3	1.20	.090	21	>16	<.01	6	<1

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
MAY								
31...	70	2	100	30	<1	10	37	71

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY								
31...	5	9	9	<.1	4	<1	600	6

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
MAY								
31...	<6.0	860	5.9	460	5.1	400	.21	1.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
AUG				
01...	1325	3.8	7670	79

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft upstream from mouth and 16.2 mi west of Rio Blanco.

DRAINAGE AREA.--1.06 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to August 1984 (Discontinued).

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,335 ft, from topographic map. Nov. 10, 1980 to June 10, 1981 at datum 0.21 ft, lower.

REMARKS.--Records poor. Most flow due to discharge of settling ponds on tract Cb, except for summer thunder storms.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 576 ft^3/s, Aug. 1, 1984, gage height, 6.38 ft, on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 576 ft^3/s at 1230 Aug. 1, gage height, 6.38 ft, on basis of slope area measurement of peak flow; no flow Aug. 9-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.40	.49	.53	.59	.49	.52	.55	.51	.58	8.5	
2	.49	.35	.53	.53	.63	.44	.53	.57	.30	.62	.20	
3	.53	.44	.53	.53	.54	.49	.54	.61	.38	1.2	.15	
4	.53	.44	.53	.53	.58	.53	.54	.61	.31	1.2	.12	
5	.53	.40	.53	.53	.58	.55	.57	.55	.36	.71	.10	
6	.49	.41	.52	.53	.53	.58	.58	.55	.44	.62	.08	
7	.49	.42	.52	.53	.52	.60	.59	.53	1.8	.67	.05	
8	.44	.60	.50	.53	.61	.62	.63	.51	1.3	.62	.02	
9	.44	.57	.50	.53	.60	.60	.68	.49	.58	.82	.00	
10	.44	.71	.50	.53	.56	.60	.64	.48	.40	.71	.00	
11	.44	.58	.50	.53	.51	.60	.68	.45	.93	.58	.00	
12	.44	.58	.49	.53	.33	.60	.67	.49	1.1	.62	.00	
13	.40	.77	.53	.58	.50	.60	.63	.55	1.4	.99	.00	
14	.53	.99	.53	.53	.63	.62	.63	.75	.62	.77	.00	
15	.49	.99	.53	.49	.58	.58	.66	.42	.67	1.1	.00	
16	.44	.82	.50	.31	.62	.53	.64	.39	.99	1.4	1.5	
17	.40	.62	.49	.33	.67	.53	.73	.40	.71	1.2	---	
18	.35	.62	.53	.35	.71	.58	.72	.38	.77	1.2	---	
19	.35	.62	.49	.37	.65	.71	.67	.37	.58	1.4	---	
20	.40	.62	.67	.39	.62	.62	.64	.33	.62	1.3	---	
21	.40	.62	.53	.41	.60	.60	.64	.46	.62	.88	---	
22	.40	.62	.53	.43	.60	.58	.59	.24	.93	1.2	---	
23	.44	.53	.53	.45	.60	.50	.50	.24	1.1	1.1	---	
24	.40	.67	.53	.47	.60	.51	.62	.22	.53	.93	---	
25	.40	.67	.53	.49	.60	.55	.76	.24	.49	.95	---	
26	.35	.58	.53	.57	.60	.56	.91	.25	.40	.68	---	
27	.40	.58	.53	.61	.60	.63	.68	.32	.40	.40	---	
28	.40	.49	.53	.65	.58	.56	.61	.34	.47	.38	---	
29	.40	.49	.53	.60	.58	.54	.57	.31	.48	.31	---	
30	.35	.50	.53	.56	---	.53	.54	.29	.58	.31	---	
31	.49	---	.53	.55	---	.52	---	.74	---	.22	---	
TOTAL	13.50	17.70	16.24	15.50	16.92	17.55	18.91	13.63	20.77	25.67	---	
MEAN	.44	.59	.52	.50	.58	.57	.63	.44	.69	.83	---	
MAX	.53	.99	.67	.65	.71	.71	.91	.75	1.8	1.4	---	
MIN	.35	.35	.49	.31	.33	.44	.50	.22	.30	.22	---	
AC-FT	27	35	32	31	34	35	38	27	41	51	---	

CAL YR 1983 TOTAL 220.90 MEAN .61 MAX 1.8 MIN .01 AC-FT 438

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
pH: February to September 1981.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler April 1974 to September 1982.

REMARKS.--Daily maximum and minimum values of specific conductance are available in the district office. Organic Fractionation analyses data are available in the Meeker sub-district office. Monitor shut down August 1 to September 30, 1984.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 micromhos Sept. 16, 1980; minimum observed, 220 micromhos Jan. 26, 1982.
WATER TEMPERATURES: Maximum, 33.5°C July 23, 1981; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L estimated Sept. 3, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 900 tons, estimated, Sept. 3, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV 09...	1425	.71	2190	9.0	8.0	9.4	1.3	29	2.7	K16	K18
APR 06...	1310	.66	2120	9.1	16.5	7.8	1.1	--	--	--	--
MAY 25...	0920	.24	2170	9.2	15.0	8.1	--	26	>2.7	400	80
JUN 20...	1105	.62	2170	9.1	23.0	7.0	--	--	--	--	--
JUL 25...	1130	.95	2150	9.3	25.0	6.7	--	--	--	--	--
SEP 12...	1000	.04	2130	9.0	14.0	8.4	--	--	--	--	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV 09...	3300	72	14	8.6	500	27	2.0	1160	<.5	38	8.2
APR 06...	--	51	8.9	6.7	560	35	1.5	1230	--	27	8.7
MAY 25...	240	57	10	7.4	520	31	1.6	1200	<.5	27	11
JUN 20...	--	52	9.0	6.9	600	37	1.6	1200	--	32	9.2
JUL 25...	--	51	8.8	6.8	520	33	1.7	1060	--	25	7.8
SEP 12...	--	47	7.6	6.6	620	41	1.9	1200	--	25	8.5

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
NOV 09...	19	.01	13	1300	1.8	2.5	11	.79	.060	.44
APR 06...	19	--	11	1400	1.9	2.5	34	.71	.040	.36
MAY 25...	20	<.01	10	1300	1.8	.86	10	.59	<.010	--
JUN 20...	23	--	11	1400	1.9	2.4	27	.58	.020	.68
JUL 25...	18	--	12	1200	1.7	5.3	70	.60	.030	.27
SEP 12...	19	--	11	1400	1.9	.15	86	.71	.020	.68

K BASED ON NON-IDEAL COLONY COUNT.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
NOV 09...	.50	.240	.020	3.5	--	--	5	<1	700	1300
APR 06...	.40	.070	.010	3.8	.60	--	<1	--	710	1100
MAY 25...	.60	.020	.010	4.2	.60	<.01	<1	<1	700	1400
JUN 20...	.70	.060	.060	3.9	.60	--	<1	--	710	950
JUL 25...	.30	.110	.010	4.2	2.1	--	<1	--	670	970
SEP 12...	.70	.090	<.010	5.2	.80	--	1	--	740	600

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV 09...	80	2	500	<1	<10	6	100
APR 06...	--	1	--	--	--	--	60
MAY 25...	30	<1	600	2	<10	1	<10
JUN 20...	--	<1	--	--	--	--	20
JUL 25...	--	1	--	--	--	--	30
SEP 12...	--	1	--	--	--	--	60

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 09...	<1	40	<10	<.1	<4	<1	10
APR 06...	--	--	<10	--	--	--	--
MAY 25...	4	40	<10	<.1	4	<1	<10
JUN 20...	--	--	<10	--	--	--	--
JUL 25...	--	--	<10	--	--	--	--
SEP 12...	--	--	<10	--	--	--	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
NOV 09...	7.5	<49	11	<22	7.4	<19	6.5	.26	.8
MAY 25...	--	<34	.5	<20	.7	<17	.7	.32	1.0

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 09...	1425	.71	297	.57
APR 06...	1310	.66	101	.18
MAY 25...	0920	.24	29	.02
JUN 20...	1105	.62	175	.29
JUL 25...	1130	1.6	77	.33
AUG 01...	1230	38	129000	13200
01...	1240	33	113000	10100
SEP 12...	1000	.04	70	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	2080	2110	2080	2080	---	2060	---	2070		
2	---	---	2070	2100	2090	2070	---	2010	---	2100		
3	1950	---	2080	---	2080	2080	---	2050	---	2110		
4	2000	2130	2060	2100	---	2090	---	2050	---	2120		
5	2000	2110	2130	2110	---	2080	---	2050	---	2120		
6	2000	2110	2110	2100	---	2100	2030	2060	---	2120		
7	2010	2120	2070	2100	---	---	2040	2070	---	2130		
8	2030	2010	2070	2090	---	2070	2030	2090	---	2120		
9	2040	2060	2070	2090	---	2100	1980	2100	---	1960		
10	2030	2060	2080	2110	---	2080	2010	2110	---	1220		
11	2080	2110	2080	2070	---	2080	1990	2120	---	1550		
12	2120	2110	2080	2070	---	2090	1980	2100	---	1710		
13	2120	2090	2080	2080	---	2010	2050	2100	---	1800		
14	2060	2100	2070	2060	---	2010	2060	2100	---	1820		
15	2090	2090	2060	2090	---	2000	2070	2100	---	1860		
16	2100	2090	2110	2160	2070	2040	2080	2110	---	1880		
17	2110	2080	2070	2090	2080	2030	2080	2120	---	1890		
18	2120	2060	2080	2210	2080	2020	2040	2110	---	1930		
19	2110	2070	2080	2130	2150	2060	2050	2120	---	2020		
20	2110	2070	2060	2110	2200	2050	2020	2130	---	2040		
21	2110	2050	---	2000	---	1990	2050	2110	---	2100		
22	2110	2080	---	1960	2060	2040	2060	2120	---	2120		
23	2120	2140	---	1980	2090	2060	2080	2130	---	2130		
24	2100	2070	---	2000	---	2050	2080	2120	---	2140		
25	2110	2050	---	2140	---	2040	1950	2120	---	2140		
26	2110	2030	---	2050	---	2060	2010	2130	---	---		
27	2110	2060	2020	2060	---	---	2040	2130	---	---		
28	2120	2070	---	2070	---	---	2050	2130	2100	---		
29	2120	2080	---	2070	---	---	2060	2150	2080	---		
30	2120	2080	---	2080	---	---	2060	2150	2030	---		
31	2120	---	2070	2080	---	---	---	2110	---	---		

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	10.0	---	---	6.0	1.5	1.5	.0	5.5	.5	12.0	2.5
2	12.5	8.0	---	---	8.0	3.5	.0	.0	5.0	.5	10.5	.0
3	12.5	8.0	---	---	6.0	.0	---	---	6.0	.0	9.0	.0
4	19.5	5.5	14.5	4.5	4.0	.0	1.5	.0	---	---	4.0	.0
5	20.0	6.5	12.0	4.5	2.0	.0	2.5	.0	---	---	1.5	.0
6	20.5	6.5	14.0	3.0	.0	.0	2.5	.0	---	---	4.0	.0
7	17.5	7.0	14.0	4.5	3.0	.0	2.5	.0	---	---	---	---
8	20.0	6.5	9.5	3.5	4.5	.5	3.5	.0	---	---	14.0	1.5
9	21.0	9.5	8.5	1.0	5.5	.0	5.0	.0	---	---	9.5	.0
10	15.5	8.5	11.0	3.5	5.5	1.0	4.0	.0	---	---	12.0	.0
11	15.5	5.0	10.0	3.5	6.5	.0	4.5	1.0	---	---	11.5	1.5
12	16.5	3.0	10.5	5.0	5.0	.0	5.0	.5	---	---	10.0	.0
13	17.0	4.0	11.0	4.0	3.5	.0	4.0	.5	---	---	14.5	.0
14	11.5	6.5	8.5	2.0	3.5	.0	4.5	.0	---	---	11.0	.0
15	14.5	3.0	9.5	2.0	4.5	.0	2.5	.5	---	---	14.0	.5
16	15.5	2.5	9.5	1.5	.5	.0	.5	.5	7.5	3.0	12.0	1.0
17	15.0	3.0	10.0	3.0	4.5	.5	.5	.5	4.5	1.0	14.0	.5
18	13.0	6.0	6.5	2.5	4.5	.0	.5	.5	6.0	.0	5.0	.0
19	13.5	2.0	7.0	.5	4.5	.0	.5	.5	3.0	.0	14.5	.0
20	14.5	1.0	8.5	2.5	1.5	.0	.5	.5	1.5	.0	15.5	.0
21	15.5	2.0	5.5	1.0	---	---	2.0	.5	6.5	.0	17.5	.0
22	16.0	2.0	4.0	.0	---	---	4.0	1.5	7.0	.0	11.0	4.0
23	15.5	3.0	.5	.0	---	---	4.5	2.0	---	---	16.0	2.5
24	8.0	2.5	4.5	.0	---	---	5.0	2.5	---	---	19.0	2.0
25	13.5	.5	6.5	2.5	---	---	5.5	3.0	---	---	14.0	3.0
26	14.5	1.0	2.5	.0	---	---	5.5	2.0	---	---	9.5	4.0
27	14.5	1.5	4.0	.0	3.5	.0	5.5	1.0	---	---	---	---
28	14.5	2.0	6.0	.5	---	---	5.5	1.5	---	---	---	---
29	14.5	2.0	5.0	.0	---	---	6.0	1.5	---	---	---	---
30	13.0	3.0	5.0	.0	1.0	.0	5.5	.5	---	---	---	---
31	14.0	5.0	---	---	2.5	1.0	5.5	.5	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	15.5	4.5	---	---	28.0	11.5				
2	---	---	17.0	5.5	---	---	30.5	11.0				
3	---	---	20.0	4.0	---	---	30.5	10.0				
4	---	---	17.5	5.0	---	---	29.5	9.5				
5	---	---	19.5	5.5	---	---	30.5	9.5				
6	17.5	6.5	17.0	4.0	---	---	30.5	10.0				
7	13.5	3.5	19.0	2.5	---	---	30.5	12.5				
8	19.5	2.0	23.5	2.0	---	---	27.5	15.0				
9	9.0	.0	22.5	4.0	---	---	26.5	15.0				
10	15.5	.0	24.0	6.0	---	---	25.5	15.5				
11	10.0	.5	25.0	7.0	---	---	25.0	13.0				
12	15.5	.0	23.5	8.5	25.0	11.0	23.5	13.0				
13	17.0	2.0	25.5	7.5	24.5	8.0	22.5	16.0				
14	18.5	.5	24.5	7.5	27.0	10.0	23.0	16.5				
15	20.5	.5	20.5	8.5	23.0	12.0	23.5	17.0				
16	23.0	1.0	23.0	7.0	25.0	7.0	23.5	15.5				
17	23.0	4.0	26.5	4.5	27.5	9.5	24.0	13.5				
18	20.0	8.5	23.5	8.0	25.0	9.5	23.0	14.0				
19	17.5	7.5	26.5	6.5	29.5	9.5	24.0	14.5				
20	12.0	4.0	25.5	7.0	27.5	10.5	25.0	14.5				
21	11.5	2.5	21.0	8.5	27.5	9.5	25.5	15.5				
22	15.5	1.5	26.0	8.5	28.5	7.5	23.5	15.0				
23	22.0	2.5	28.0	7.0	26.5	11.5	24.5	14.5				
24	20.0	6.0	25.0	9.0	26.5	9.5	29.0	13.0				
25	13.0	1.0	24.0	9.0	---	---	29.5	13.0				
26	13.0	1.5	27.0	6.5	---	---	28.0	15.0				
27	17.0	1.0	26.0	7.0	---	---	24.0	16.0				
28	12.5	.5	27.0	5.5	31.0	14.0	27.5	15.5				
29	14.5	2.0	27.5	6.5	30.0	10.5	26.5	17.0				
30	14.5	5.5	28.0	7.5	21.5	12.5	24.5	17.0				
31	---	---	---	---	---	---	24.5	15.0				

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'51", long 108°14'35", in SW¼SE¼ sec.2, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 2,100 ft upstream from mouth and 16.8 mi west of Rio Blanco.

DRAINAGE AREA.--7.97 mi^2.

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,434 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32 ft^3/s, Aug. 1, 1984, gage height, 1.77 ft, from rating curve extended above 4.3 ft^3/s; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft^3/s at 1315 Aug. 1, gage height, 1.77 ft, from rating curve extended above 4.3 ft^3/s; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	2.0	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.19	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.19	2.00	.00	.61	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.01	.07	.00	.02	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.19	2.0	.00	.31	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.4	4.0	.00	1.2	.00

CAL YR 1983 TOTAL 13.71 MEAN .04 MAX 3.5 MIN .00 AC-FT 27
WTR YR 1984 TOTAL 2.80 MEAN .01 MAX 2.0 MIN .00 AC-FT 5.6

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft upstream from mouth and 17.4 mi west of Rio Blanco.

DRAINAGE AREA.--48.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Aug. 9, 1974. Altitude of gage is 6,273 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 315 acres.

AVERAGE DISCHARGE.--10 years, 2.61 ft^3/s; 1,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89 ft^3/s, July 22, 1983, gage height, 5.16 ft, from rating curve extended above 18 ft^3/s; no flow for many days in 1978, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77 ft^3/s at 1300 Aug. 1, gage height, 5.03 ft; minimum daily, 2.3 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	6.1	5.6	6.0	5.7	4.7	5.2	6.7	8.7	12	12	5.4
2	8.6	6.1	5.9	6.0	5.6	4.9	5.3	6.8	8.9	10	10	5.3
3	8.8	6.0	6.2	6.1	5.6	4.9	4.9	6.8	8.5	8.9	9.9	5.2
4	8.7	6.0	6.0	6.1	5.5	4.6	4.7	7.1	8.8	10	9.2	5.2
5	8.4	6.1	5.8	6.2	5.4	4.5	5.0	7.3	9.3	8.1	9.5	5.1
6	8.5	5.9	5.6	6.2	5.3	4.4	5.3	7.4	11	6.4	9.3	4.8
7	8.2	5.8	5.5	6.3	5.1	4.3	5.4	7.4	14	9.8	9.2	4.1
8	7.8	5.5	5.5	6.2	4.9	4.3	5.3	7.3	12	10	8.5	4.5
9	7.7	5.3	5.8	6.1	4.7	5.0	5.6	7.3	5.9	8.5	8.1	4.9
10	7.6	5.3	5.8	6.3	4.8	4.9	5.3	7.5	4.6	10	8.0	4.8
11	7.5	5.3	6.2	6.1	4.9	5.0	5.7	7.5	6.6	12	8.6	5.1
12	7.3	5.3	6.2	6.1	4.8	4.7	5.1	7.5	7.0	11	8.4	4.6
13	7.4	5.4	6.1	5.9	4.8	5.3	5.2	7.5	7.0	11	7.8	4.0
14	7.9	5.4	6.2	6.0	5.0	5.9	5.2	7.6	7.2	11	7.7	3.5
15	7.3	5.5	6.2	6.0	4.8	6.2	5.2	7.4	4.7	12	7.4	3.5
16	7.1	5.5	6.0	4.6	4.8	6.1	5.2	7.6	3.0	12	7.2	3.8
17	6.9	5.6	5.8	4.0	4.5	5.6	5.3	8.4	4.3	12	6.0	2.7
18	7.1	5.7	6.0	3.7	4.4	5.2	5.6	8.0	5.2	12	5.4	2.6
19	6.9	5.8	6.1	2.3	4.4	4.1	5.8	6.9	5.9	11	5.4	3.0
20	6.9	5.9	6.1	2.5	4.4	4.8	6.0	7.4	6.1	12	5.5	4.0
21	6.7	6.0	6.0	3.5	4.4	5.9	6.1	8.2	5.9	12	5.6	3.8
22	6.7	5.7	6.0	4.5	4.2	6.1	6.0	8.7	6.2	12	5.6	3.4
23	6.5	6.2	6.0	5.8	4.3	5.4	6.1	9.3	5.9	11	5.5	3.0
24	6.4	5.4	5.8	5.5	4.3	5.4	6.0	9.0	8.3	12	5.5	3.2
25	6.4	5.6	5.8	5.5	4.7	5.7	6.1	8.8	9.1	12	5.4	3.4
26	6.4	5.1	5.8	5.8	4.7	5.2	6.2	8.3	7.7	12	5.4	3.8
27	6.3	5.5	5.5	5.6	4.7	5.1	6.2	8.1	6.8	11	5.0	3.9
28	6.2	5.3	5.8	5.6	4.7	4.8	6.3	8.3	8.9	9.5	5.1	3.6
29	6.2	5.5	5.8	5.6	4.7	4.9	6.5	9.4	8.7	9.3	5.1	3.6
30	6.2	5.4	5.8	5.6	---	5.2	6.7	9.1	11	9.8	5.3	3.7
31	6.1	---	5.9	5.6	---	4.9	---	9.1	---	9.8	5.3	---
TOTAL	225.0	169.2	182.8	167.3	140.1	158.0	168.5	243.7	227.2	330.1	221.9	121.5
MEAN	7.26	5.64	5.90	5.40	4.83	5.10	5.62	7.86	7.57	10.6	7.16	4.05
MAX	8.8	6.2	6.2	6.3	5.7	6.2	6.7	9.4	14	12	12	5.4
MIN	6.1	5.1	5.5	2.3	4.2	4.1	4.7	6.7	3.0	6.4	5.0	2.6
AC-FT	446	336	363	332	278	313	334	483	451	655	440	241

CAL YR 1983 TOTAL 1929.3 MEAN 5.29 MAX 14 MIN 1.0 AC-FT 3830
WTR YR 1984 TOTAL 2355.3 MEAN 6.44 MAX 14 MIN 2.3 AC-FT 4670

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to September 1982.
pH: March 1976 to February 1982.
WATER TEMPERATURE: November 1974 to September 1982.
DISSOLVED OXYGEN: March 1976 to February 1982.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor November 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 micromhos July 14, 1976; minimum, 528 micromhos Mar. 18, 1976.
pH: Maximum, 8.8 units Mar. 11, 1980; minimum, 7.4 units June 4, 6, 1980.
WATER TEMPERATURES: Maximum, 30.5°C July 4, 1982; minimum, 0.0°C on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 61 tons July 29, 30, 1979; no flow many days during 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV												
10...	0950	5.9	1160	8.3	4.0	11.0	1.1	13	510	91	68	110
MAR												
27...	1245	5.0	1190	8.5	5.0	9.8	1.1	--	470	86	61	100
MAY												
23...	1150	9.3	1110	8.5	13.0	8.9	2.8	20	450	88	55	96
JUN												
20...	1220	5.6	1260	8.4	17.5	7.9	--	--	500	91	66	110
JUL												
25...	1200	12	1220	8.8	15.0	8.4	--	--	490	88	66	110
SEP												
12...	1025	4.6	1260	8.3	11.5	9.5	--	--	500	87	68	120

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV												
10...	2	--	283	<.5	290	13	.30	<.01	16	--	--	--
MAR												
27...	2	1.1	349	--	290	14	.40	--	16	780	1.1	11
MAY												
23...	2	1.0	321	<.5	270	13	.30	.02	18	740	1.0	18
JUN												
20...	2	3.4	296	--	320	12	.50	--	18	800	1.1	12
JUL												
25...	2	1.8	338	--	300	11	.40	--	17	800	1.1	26
SEP												
12...	2	2.1	422	--	310	12	.60	--	18	870	1.2	11

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
NOV												
10...	37	.64	.050	.45	.50	.060	.010	2.9	.40	<.01	8	<1
MAR												
27...	164	.83	<.010	--	.30	.200	.020	2.9	--	--	<1	--
MAY												
23...	233	1.6	.120	1.1	1.2	.250	.030	3.8	2.0	<.01	<1	<1
JUN												
20...	166	.67	.040	.66	.70	.100	.040	4.7	1.1	--	<1	--
JUL												
25...	54	.76	.040	.16	.20	.040	.010	4.1	.70	--	<1	--
SEP												
12...	193	.83	.030	.47	.50	.160	.010	4.2	1.1	--	<1	--

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV 10...	10	<1	64	110	<1	<10	1	8
MAR 27...	--	<1	--	130	--	--	--	8
MAY 23...	<10	<1	91	100	<1	<10	1	<3
JUN 20...	--	<1	--	130	--	--	--	13
JUL 25...	--	1	--	120	--	--	--	6
SEP 12...	--	<1	--	150	--	--	--	9

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 10...	<1	28	11	<.1	<2	1	2600	5
MAR 27...	--	--	18	--	--	--	--	--
MAY 23...	<1	21	13	<.1	4	2	2000	14
JUN 20...	--	--	24	--	--	--	2600	--
JUL 25...	--	--	22	--	--	--	2600	--
SEP 12...	--	--	31	--	--	--	2700	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
NOV 10...	--	<27	<1.8	<11	2.1	<9.2	1.8	.08	2.2
MAY 23...	8.8	<16	13	<9.4	9.6	<8.1	8.3	.56	2.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 10...	0950	5.9	129	2.1	JUN 20...	1220	5.6	673	10
MAR 27...	1245	5.0	278	3.8	JUL 25...	1200	12	202	6.5
MAY 23...	1150	9.3	498	13	SEP 12...	1025	4.6	386	4.8

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'31", in SE¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 120 ft downstream from private bridge, 0.4 mi upstream from Hunter Creek, and 18.7 mi west of Rio Blanco.

DRAINAGE AREA.--309 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete trapezoidal supercritical-flow flume. Altitude of gage is 6,214 ft, from topographic map. Prior to Mar. 26, 1982, at site 75 ft upstream at datum 0.98 ft, lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 26.2 ft³/s; 18,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft³/s, Sept. 3, 1977, gage height, 5.17 ft, present datum, maximum gage height, 5.85 ft, May 16, 1984; no flow Oct. 4, 5, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 3, 1977, exceeded all other floods at this location since at least 1939, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 458 ft³/s at 0800 May 16, gage height 5.85 ft; minimum daily, 20 ft³/s, Dec. 26,27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	43	33	24	26	27	41	125	152	99	85	55
2	41	41	34	24	26	28	40	143	142	88	78	54
3	41	40	34	24	26	29	40	158	131	94	76	51
4	41	38	35	24	26	28	40	162	130	100	84	50
5	40	38	35	24	26	28	41	181	137	92	77	50
6	42	39	34	24	26	31	41	202	141	76	76	48
7	42	40	34	26	26	32	42	206	290	76	75	45
8	40	43	32	26	26	30	57	210	243	76	72	45
9	39	40	30	26	26	31	78	214	206	75	71	43
10	38	41	30	26	26	32	62	249	192	118	70	43
11	37	39	30	26	26	33	61	291	182	102	69	43
12	41	39	28	28	26	36	57	357	174	90	69	43
13	51	33	28	28	26	36	56	393	169	86	68	42
14	55	39	26	30	27	35	55	409	157	88	69	40
15	54	37	26	28	26	36	55	413	156	84	63	39
16	51	35	26	28	26	37	90	426	143	81	67	43
17	49	35	24	28	26	37	121	367	138	75	62	40
18	49	36	22	28	26	37	150	314	135	73	58	39
19	48	36	23	28	26	37	166	288	126	72	56	37
20	47	34	22	28	26	38	150	262	113	72	66	38
21	47	38	22	28	26	41	116	260	107	68	63	37
22	48	34	22	28	27	40	106	246	105	69	59	37
23	48	35	22	28	27	40	108	235	101	70	57	36
24	48	33	22	28	27	40	126	239	96	75	57	40
25	48	35	22	28	27	42	145	230	99	77	56	39
26	52	36	20	28	27	41	146	209	103	75	55	35
27	45	36	20	28	27	43	129	193	99	75	54	35
28	42	36	21	28	27	41	128	183	94	75	53	35
29	41	40	22	28	27	41	119	164	90	74	51	36
30	40	40	22	28	---	40	119	151	93	74	50	35
31	41	---	22	28	---	40	---	144	---	75	49	---
TOTAL	1387	1129	823	836	763	1107	2685	7624	4244	2524	2015	1253
MEAN	44.7	37.6	26.5	27.0	26.3	35.7	89.5	246	141	81.4	65.0	41.8
MAX	55	43	35	30	27	43	166	426	290	118	85	55
MIN	37	33	20	24	26	27	40	125	90	68	49	35
AC-FT	2750	2240	1630	1660	1510	2200	5330	15120	8420	5010	4000	2490

CAL YR 1983 TOTAL 24070.5 MEAN 65.9 MAX 430 MIN 9.5 AC-FT 47740
WTR YR 1984 TOTAL 26390 MEAN 72.1 MAX 426 MIN 20 AC-FT 52340

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
pH: October 1974 to September 1984, (discontinued).
WATER TEMPERATURE: October 1974 to current year.
DISSOLVED OXYGEN: October 1974 to September 1984, (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since October 1974.

REMARKS.--Daily maximum and minimum specific conductance data available in district office. Organic Fractionation analyses data are available in the Meeker sub-district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 1,980 micromhos Jan. 15, 1976; minimum, 550 micromhos Apr. 5, 1978.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, 0.0°C many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 87,000 mg/L (estimated) Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,000 tons (estimated) Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
pH: Not determined.
WATER TEMPERATURES: Maximum, 21.5°C on several days in July; minimum, 0.0°C many days during winter months.
DISSOLVED OXYGEN: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, not determined; minimum daily, 15 mg/L Oct. 22.
SEDIMENT LOADS: Maximum daily, 1,000 tons (estimated) July 28; minimum daily, 0.28 tons Oct. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
NOV 09...	1145	40	1140	8.4	4.0	11.6	2.0	16	1.2	K4
MAR 27...	1050	43	1230	8.4	5.0	10.0	1.5	--	--	--
MAY 24...	1430	239	868	8.5	13.5	8.1	--	140	1.6	K430
JUN 21...	1225	154	1100	8.3	14.0	8.5	--	--	--	--
JUL 25...	1230	53	1190	8.3	15.0	7.8	--	--	--	--
SEP 12...	1300	44	1200	8.4	12.5	9.5	--	--	--	--

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV 09...	K1	180	420	75	56	130	3	2.3	407	<.5
MAR 27...	--	--	410	75	53	130	3	2.4	421	--
MAY 24...	340	400	330	69	38	72	2	2.9	207	1.0
JUN 21...	--	--	410	79	52	100	2	2.7	308	--
JUL 25...	--	--	--	--	--	--	--	--	--	--
SEP 12...	--	--	440	77	59	120	3	2.6	374	--

K BASED ON NON-IDEAL COLONY COUNT.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
NOV 09...	260	14	1.0	<.01	15	800	1.1	86	42	1.2
MAR 27...	260	17	1.0	--	14	810	1.1	93	380	.97
MAY 24...	200	15	.50	.04	14	540	.73	346	2210	2.3
JUN 21...	230	14	.60	--	16	680	.92	283	256	1.8
JUL 25...	--	--	--	--	--	--	--	--	912	1.2
SEP 12...	280	14	.60	--	16	800	1.1	95	24	1.9

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)
NOV 09...	.050	.75	.80	.060	.010	4.0	.40	--	7	<1
MAR 27...	<.010	--	.50	.280	.020	5.9	2.6	--	2	--
MAY 24...	.040	.56	.60	1.50	.030	7.7	>8.0	<.01	<1	<1
JUN 21...	.030	1.1	1.1	.030	.020	6.5	2.7	--	2	--
JUL 25...	.030	.77	.80	.50	.020	6.4	4.2	--	3	--
SEP 12...	.030	.77	.80	.100	.020	4.6	.80	--	<1	--

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 09...	<10	1	97	170	<1	<10	3	6
MAR 27...	--	1	--	150	--	--	--	15
MAY 24...	10	2	100	90	<1	<10	4	5
JUN 21...	--	2	--	130	--	--	--	12
JUL 25...	--	--	--	--	--	--	--	--
SEP 12...	--	1	--	150	--	--	--	<3

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 09...	2	22	21	<.1	5	2	2000	6
MAR 27...	--	--	19	--	--	--	--	--
MAY 24...	<1	24	14	<.1	8	3	990	20
JUN 21...	--	--	12	--	--	--	1500	--
JUL 25...	--	--	--	--	--	--	1700	--
SEP 12...	--	--	13	--	--	--	2000	--

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
NOV									
09...	2.0	<25	3.0	<11	1.9	<9.4	1.6	.10	3.1
MAY									
24...	--	<14	130	<8.5	90	<7.3	77	.16	3.9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV					APR				
08...	1410	41	224	25	16...	1328	90	2350	571
09...	1145	40	107	12	MAY				
17...	1240	35	182	17	11...	1305	291	9500	7460
DEC					14...	1315	414	9600	10700
01...	1320	33	258	23	15...	0950	437	14200	16800
07...	1215	34	259	24	24...	1430	239	4740	3060
JAN					JUN				
04...	1355	24	405	26	07...	1241	356	10700	10300
10...	1425	26	543	38	28...	0952	97	935	245
20...	1610	28	218	16	JUL				
FEB					25...	1230	53	1230	176
02...	1605	26	684	48	AUG				
23...	1456	27	313	23	07...	1228	79	800	171
MAR					21...	1230	61	596	98
01...	1300	27	208	15	SEP				
06...	1546	31	303	25	12...	1300	44	225	27
27...	1050	43	478	55	12...	1332	44	270	32
APR									
10...	1448	59	1570	250					

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1220	1250	---	1110	1220	1220	---	981	1210	---	1160
2	---	1220	1250	---	1140	---	1230	988	980	1230	---	1160
3	---	1220	1250	---	1160	---	1230	949	1010	1200	---	1180
4	---	1220	1240	---	1150	---	1240	985	1030	1160	---	1180
5	---	1220	1230	---	1130	---	1220	982	1020	1150	---	1190
6	---	1220	1240	---	---	1180	1210	969	1040	1150	---	1190
7	---	1220	1240	---	1170	1120	1200	979	830	1150	1180	---
8	---	1180	1240	---	1190	1130	1110	977	926	1140	1190	---
9	---	1210	1240	---	1180	1130	927	939	971	1130	1180	---
10	---	1240	1240	---	1200	1130	1000	884	991	---	1180	---
11	---	1230	1230	---	1180	1150	1030	815	991	1080	1170	---
12	---	1230	1230	1140	1170	1140	1090	769	992	---	1160	---
13	---	1230	1220	1150	1220	---	1120	757	1010	---	1150	---
14	---	1220	1210	1150	1210	---	1130	740	1020	---	1070	---
15	---	1220	1200	1160	1210	---	1090	709	1040	---	1100	---
16	---	1220	1220	1250	1210	---	969	718	1040	---	1000	---
17	---	1220	1220	1230	1220	---	834	744	1050	---	1060	---
18	---	---	1210	1290	1210	---	740	774	1070	---	1170	---
19	---	---	1210	1300	1210	---	746	812	1080	---	1170	---
20	---	---	1190	1270	1220	---	821	829	1090	---	1110	1180
21	---	---	1250	1270	1220	1120	962	837	1110	---	1140	1180
22	---	1250	1230	1210	1240	1180	1010	857	1150	---	1180	1180
23	---	1260	1170	1170	1230	1230	1000	880	1170	---	1180	1190
24	---	1260	1200	1150	1210	1220	938	896	1190	---	1160	1180
25	---	1250	1170	1140	1200	1210	---	909	1180	---	1180	1180
26	---	1230	1150	1120	1200	1230	---	895	1170	---	1180	1180
27	1200	1250	1170	---	1190	1230	1010	950	1190	---	1180	1180
28	1210	1250	1190	---	1180	1230	1000	961	1210	---	1180	1190
29	1210	1250	1270	---	1190	1230	1020	956	1220	---	1180	1190
30	1210	1250	1160	---	---	1220	1040	961	1220	---	1180	1190
31	1220	---	1170	1100	---	1230	---	962	---	---	1180	---

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	8.5	8.4	8.6	8.5	---	---	---	---	8.5	8.4
2	---	---	8.5	8.4	8.5	8.4	---	---	8.5	8.4	---	---
3	---	---	8.5	8.4	8.5	8.4	---	---	8.5	8.2	---	---
4	---	---	8.6	8.6	8.5	8.4	---	---	8.3	8.2	---	---
5	---	---	8.7	8.6	8.5	8.4	---	---	8.3	8.2	---	---
6	---	---	8.7	8.6	8.5	8.4	---	---	8.3	8.2	8.4	8.3
7	---	---	8.6	8.5	8.5	8.4	---	---	8.5	8.2	8.4	8.4
8	---	---	8.7	8.5	8.6	8.5	---	---	8.4	8.3	8.4	8.4
9	---	---	8.7	8.6	8.6	8.6	---	---	8.4	8.3	8.4	8.4
10	---	---	8.8	8.6	8.6	8.6	---	---	8.3	8.3	8.4	8.4
11	---	---	8.8	8.6	8.6	8.6	---	---	8.4	8.3	8.4	8.4
12	---	---	8.7	8.6	8.6	8.6	8.6	8.5	8.4	8.3	8.4	8.4
13	---	---	8.7	8.4	8.6	8.6	8.6	8.6	8.4	8.3	8.4	8.3
14	---	---	8.6	8.4	8.6	8.6	8.7	8.6	8.3	8.3	8.4	8.3
15	---	---	8.5	8.4	8.6	8.6	---	---	8.4	8.3	8.4	8.3
16	---	---	8.6	8.4	8.6	8.6	---	---	8.4	8.3	8.4	8.3
17	---	---	8.6	8.4	8.6	8.6	---	---	8.4	8.3	8.4	8.3
18	---	---	8.6	8.5	8.6	8.6	---	---	8.4	8.3	8.4	8.4
19	---	---	8.6	8.4	8.6	8.6	---	---	8.4	8.3	8.4	8.4
20	---	---	8.5	8.4	8.6	8.6	8.6	8.4	8.3	8.2	8.4	8.4
21	---	---	8.6	8.4	8.6	8.5	8.5	8.4	8.4	8.3	8.5	8.3
22	---	---	8.6	8.4	8.6	8.5	8.4	8.3	8.3	8.3	8.6	8.5
23	---	---	8.6	8.5	8.6	8.6	8.3	8.2	8.5	8.3	8.6	8.5
24	---	---	8.6	8.5	8.6	8.6	8.3	8.2	8.5	8.4	8.5	8.5
25	---	---	8.6	8.5	8.7	8.6	8.3	8.2	8.4	8.4	8.5	8.5
26	---	---	8.6	8.5	8.7	8.6	8.3	8.2	8.4	8.4	8.6	8.5
27	8.5	8.4	8.6	8.6	8.6	8.6	---	---	8.4	8.4	8.6	8.4
28	8.5	8.3	8.6	8.6	8.8	8.6	---	---	8.4	8.4	8.6	8.5
29	8.5	8.4	8.6	8.6	8.8	8.6	---	---	8.4	8.4	8.6	8.5
30	8.5	8.4	8.6	8.6	8.7	8.6	---	---	---	---	8.6	8.5
31	8.5	8.4	---	---	8.7	8.6	---	---	---	---	8.6	8.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.6	8.5	---	---	8.5	8.4	8.3	8.2	---	---	8.3	8.3
2	8.6	8.5	8.6	8.5	8.4	8.4	8.3	8.2	---	---	8.4	8.3
3	8.6	8.5	8.5	8.5	8.5	8.4	8.3	8.2	---	---	8.4	8.3
4	8.6	8.5	8.6	8.5	8.5	8.4	8.3	8.2	---	---	8.4	8.3
5	8.6	8.5	8.6	8.5	8.5	8.4	8.3	8.2	---	---	8.4	8.3
6	8.5	8.5	8.6	8.5	8.5	8.4	8.3	8.2	---	---	8.4	8.3
7	8.5	8.5	8.6	8.5	8.4	8.3	8.3	8.2	8.3	8.3	---	---
8	8.6	8.4	8.6	8.5	8.4	8.4	8.3	8.2	8.4	8.3	---	---
9	8.5	8.4	8.5	8.5	8.5	8.4	8.3	8.2	8.4	8.3	---	---
10	8.6	8.5	8.5	8.4	8.5	8.4	---	---	8.4	8.3	---	---
11	8.6	8.5	8.4	8.4	8.4	8.4	8.3	8.2	8.4	8.3	---	---
12	8.6	8.4	8.4	8.4	8.4	8.3	8.3	8.2	8.4	8.3	---	---
13	8.6	8.5	8.4	8.4	8.4	8.3	8.3	8.2	8.4	8.3	---	---
14	8.6	8.5	8.4	8.3	8.4	8.3	8.3	8.2	8.3	8.1	---	---
15	8.6	8.4	8.4	8.2	8.3	8.3	8.3	8.2	8.3	8.2	---	---
16	8.5	8.4	8.4	8.3	8.4	8.3	8.3	8.2	8.2	8.1	---	---
17	8.4	8.4	8.5	8.3	8.4	8.3	8.3	8.2	8.3	8.1	---	---
18	8.4	8.4	8.4	8.4	8.4	8.3	8.3	8.2	8.4	8.3	---	---
19	8.5	8.3	8.5	8.4	8.4	8.3	8.3	8.2	8.4	8.3	---	---
20	8.5	8.4	8.5	8.4	8.3	8.2	8.3	8.2	8.4	8.3	8.3	8.3
21	8.6	8.5	8.5	8.4	8.3	8.3	8.3	8.2	8.4	8.3	8.3	8.3
22	8.6	8.5	8.5	8.4	8.3	8.3	8.3	8.2	8.4	8.3	8.4	8.3
23	8.5	8.4	8.5	8.4	8.3	8.2	8.3	8.2	8.4	8.3	8.4	8.3
24	8.5	8.5	8.5	8.4	8.3	8.2	8.3	8.2	8.4	8.2	8.4	8.3
25	---	---	8.5	8.4	8.3	8.2	8.3	8.2	8.4	8.4	8.4	8.4
26	---	---	8.5	8.4	8.3	8.2	8.3	8.2	8.4	8.3	8.4	8.4
27	8.6	8.5	8.5	8.4	8.3	8.2	8.3	8.3	8.4	8.3	8.4	8.3
28	8.6	8.5	8.5	8.4	8.3	8.2	8.3	8.3	8.4	8.3	8.4	8.4
29	8.6	8.5	8.5	8.4	8.2	8.2	8.3	8.3	8.4	8.3	8.4	8.3
30	8.6	8.5	8.5	8.4	8.3	8.2	8.3	8.3	8.4	8.3	8.4	8.3
31	---	---	8.5	8.3	---	---	8.3	8.2	8.4	8.3	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	11.0	5.5	4.5	2.0	---	---	2.0	.5	7.0	1.0
2	---	---	10.0	6.0	6.5	4.0	---	---	2.5	.5	---	---
3	---	---	10.5	4.5	4.5	1.5	---	---	3.0	.5	---	---
4	---	---	10.0	4.0	3.5	2.0	---	---	5.0	.5	---	---
5	---	---	9.0	4.5	2.5	.0	---	---	4.0	.5	---	---
6	---	---	10.0	4.0	1.5	.0	---	---	4.0	.5	7.5	3.0
7	---	---	10.5	5.0	3.0	.0	---	---	3.5	.5	9.0	.5
8	---	---	8.5	3.5	5.0	2.5	---	---	6.0	2.5	9.5	.5
9	---	---	6.5	2.0	5.0	1.5	---	---	6.0	.5	7.5	2.5
10	---	---	8.0	3.5	5.5	3.5	---	---	7.0	1.5	10.0	2.0
11	---	---	7.5	4.0	5.0	1.5	---	---	5.5	.5	10.0	4.0
12	---	---	8.0	5.0	4.5	2.5	3.5	.5	5.0	.5	8.0	2.5
13	---	---	8.5	4.0	3.5	1.5	1.5	.5	7.0	2.5	10.0	2.5
14	---	---	7.0	3.5	2.5	.0	3.0	.5	6.0	2.5	7.5	4.0
15	---	---	6.5	2.0	4.0	1.0	1.0	.0	6.0	1.0	10.0	3.0
16	---	---	6.5	2.0	1.5	.0	.5	.0	5.5	.5	10.0	5.0
17	---	---	7.0	3.5	4.0	.5	.5	.0	4.0	1.5	9.5	2.5
18	---	---	6.0	4.0	3.5	1.5	.5	.0	5.0	.5	5.0	3.0
19	---	---	6.0	3.0	4.0	1.5	.5	.0	3.5	.5	11.5	.5
20	---	---	6.0	3.5	2.5	.0	.5	.0	2.5	.5	13.0	2.5
21	---	---	5.5	3.0	.5	.0	.5	.0	4.0	.5	12.0	3.5
22	---	---	3.5	1.0	.5	.0	.5	.5	5.5	.5	8.0	3.5
23	---	---	2.5	.0	.5	.5	.5	.5	5.0	.0	11.5	4.0
24	---	---	3.5	.0	.5	.0	.5	.5	4.5	.5	13.0	2.5
25	---	---	5.5	3.5	.5	.0	.5	.5	4.5	1.0	9.5	4.5
26	---	---	3.0	.5	1.0	.0	1.0	.5	5.5	.5	7.0	3.0
27	10.5	5.5	3.0	.5	3.5	1.5	---	---	4.5	.5	8.0	3.0
28	10.5	4.0	4.5	1.0	1.5	.0	---	---	5.5	.5	10.0	3.0
29	10.5	4.5	3.5	1.0	.5	.0	---	---	7.5	.5	11.5	4.0
30	9.5	4.0	3.5	.0	1.0	.0	---	---	---	---	7.0	4.0
31	10.0	6.0	---	---	3.5	.5	1.5	.0	---	---	11.0	4.0
MONTH	10.5	4.0	11.0	.0	6.5	.0	3.5	.0	7.5	.0	13.0	.5

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	4.0	---	---	13.5	10.5	20.5	11.5	---	---	19.0	12.5
2	9.0	4.0	---	---	17.0	9.0	21.5	12.0	---	---	18.5	10.0
3	11.0	4.0	11.5	6.5	16.0	10.5	21.0	12.0	---	---	19.0	10.0
4	14.0	2.0	11.0	6.0	16.0	9.5	21.0	11.5	---	---	19.0	10.0
5	14.5	4.0	10.5	6.0	12.5	10.0	21.0	11.5	---	---	19.0	10.5
6	13.5	5.5	9.5	6.5	10.0	8.0	21.5	11.0	---	---	16.0	11.0
7	11.0	6.0	10.5	4.5	12.0	6.0	21.5	12.5	21.0	14.5	---	---
8	13.5	4.0	14.0	4.5	11.0	7.5	20.0	13.5	20.5	11.5	---	---
9	8.0	2.5	13.5	6.5	12.0	7.0	19.5	13.5	21.0	11.5	---	---
10	9.0	1.0	15.0	7.0	15.5	7.0	---	---	20.5	11.5	---	---
11	7.5	3.0	15.0	8.5	16.5	9.5	20.0	11.5	19.0	11.5	---	---
12	10.5	1.0	13.5	8.5	17.5	9.5	20.0	11.5	18.5	12.5	---	---
13	12.5	4.5	14.5	7.5	18.5	10.0	18.5	13.0	17.5	12.0	---	---
14	13.5	3.0	16.5	7.5	19.0	10.5	19.0	13.5	20.5	13.0	---	---
15	14.0	3.5	14.5	8.5	17.5	12.5	19.0	13.5	17.0	13.0	---	---
16	13.5	3.0	15.0	7.5	15.5	11.0	21.0	12.0	19.0	13.5	---	---
17	12.5	4.0	15.5	6.0	18.0	10.0	20.5	11.5	18.5	13.5	---	---
18	11.5	6.5	13.0	8.0	17.0	10.0	20.0	11.5	19.5	13.0	---	---
19	11.0	6.5	16.0	7.5	17.5	10.0	21.0	12.0	19.0	13.0	---	---
20	7.0	4.0	16.0	8.5	19.0	11.5	20.0	12.5	16.0	13.5	17.5	14.0
21	8.0	3.5	14.0	9.5	19.5	11.0	21.5	13.0	17.0	11.5	16.5	11.5
22	10.0	4.0	17.0	9.0	19.5	10.0	19.0	13.5	20.0	11.5	17.5	10.5
23	12.5	5.0	17.5	9.0	20.0	10.5	19.5	13.0	16.5	12.5	17.5	10.0
24	---	---	15.5	10.0	20.0	10.5	21.0	13.0	18.0	12.5	13.0	8.5
25	---	---	16.5	10.0	17.0	12.5	20.5	13.0	16.5	11.5	14.0	6.0
26	---	---	16.5	9.0	19.0	11.5	20.0	13.5	19.0	11.0	12.0	7.0
27	---	---	17.0	9.0	20.5	11.5	18.5	13.5	18.5	11.0	15.0	7.5
28	7.5	3.0	17.0	8.5	20.0	12.0	21.0	13.5	20.0	11.0	13.5	7.5
29	9.0	4.0	18.0	9.0	20.5	12.0	21.0	13.0	20.0	11.0	13.5	5.5
30	---	---	17.5	9.5	16.0	13.0	19.5	13.5	20.0	10.5	14.0	5.5
31	---	---	14.5	11.0	---	---	19.5	12.5	20.0	12.0	---	---
MONTH	14.5	1.0	18.0	4.5	20.5	6.0	21.5	11.0	21.0	10.5	19.0	5.5
YEAR	21.5	.0										

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	10.9	9.1	11.0	9.4	---	---	10.1	9.4	---	---
2	---	---	10.9	9.2	11.1	9.5	---	---	---	---	---	---
3	---	---	11.1	9.2	11.5	9.5	---	---	---	---	---	---
4	---	---	11.1	8.0	10.7	9.6	---	---	---	---	---	---
5	---	---	11.0	8.4	11.8	10.2	---	---	---	---	---	---
6	---	---	11.1	8.0	11.0	10.1	---	---	---	---	11.4	9.0
7	---	---	10.8	8.0	10.6	9.3	---	---	9.9	9.4	12.4	9.2
8	---	---	11.3	8.5	10.0	9.2	---	---	9.6	8.3	11.7	8.4
9	---	---	11.6	9.7	10.2	8.6	---	---	---	---	11.6	9.5
10	---	---	11.8	9.5	---	---	---	---	---	---	---	---
11	---	---	11.2	8.8	---	---	---	---	---	---	---	---
12	---	---	11.3	9.6	---	---	10.8	10.5	---	---	---	---
13	---	---	11.4	9.6	---	---	11.3	10.8	---	---	10.7	8.8
14	---	---	11.6	10.0	---	---	10.9	10.1	---	---	10.2	9.0
15	---	---	---	---	---	---	11.1	10.6	---	---	---	---
16	---	---	---	---	---	---	10.9	10.3	---	---	---	---
17	---	---	12.2	9.7	---	---	10.6	10.3	---	---	---	---
18	---	---	11.2	9.9	---	---	10.6	10.2	---	---	---	---
19	---	---	11.8	9.8	---	---	10.3	10.0	---	---	---	---
20	---	---	11.0	9.3	---	---	10.4	10.1	---	---	---	---
21	---	---	10.5	9.5	---	---	10.5	10.1	---	---	10.1	8.6
22	---	---	10.9	8.9	---	---	10.3	10.2	---	---	10.8	9.1
23	---	---	12.2	10.5	---	---	10.4	10.2	11.1	10.3	---	---
24	---	---	11.7	10.0	---	---	10.4	10.2	11.3	9.7	---	---
25	---	---	10.0	8.8	---	---	10.4	9.8	10.4	9.4	---	---
26	---	---	11.2	9.3	---	---	9.9	9.1	10.4	8.8	---	---
27	11.7	10.1	11.6	10.1	---	---	---	---	10.1	8.7	11.2	9.3
28	11.7	9.8	12.0	9.2	---	---	---	---	---	---	12.1	10.3
29	11.7	9.7	11.4	9.7	---	---	---	---	---	---	12.0	9.7
30	11.6	9.5	11.7	9.5	---	---	---	---	---	---	11.4	10.5
31	10.7	9.3	---	---	---	---	10.2	9.5	---	---	11.6	9.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.2	9.4	---	---	---	---	---	---	---	---	---	---
2	11.6	10.3	10.7	9.6	---	---	---	---	---	---	---	---
3	11.8	10.1	11.5	9.4	---	---	---	---	---	---	---	---
4	12.4	8.7	10.3	9.3	---	---	---	---	---	---	8.8	7.3
5	11.3	8.4	10.7	9.5	---	---	9.3	7.4	---	---	9.1	7.0
6	10.5	8.5	10.4	9.4	---	---	9.2	6.8	---	---	8.5	7.6
7	10.4	9.1	11.1	9.1	9.7	8.2	8.4	6.5	8.4	6.8	---	---
8	11.1	8.3	11.0	8.2	9.1	8.4	---	---	8.5	6.3	---	---
9	11.3	9.6	10.1	7.7	9.0	7.5	---	---	---	---	---	---
10	12.2	9.8	9.2	7.0	8.5	6.4	---	---	---	---	---	---
11	12.0	10.8	9.3	7.5	---	---	---	---	---	---	---	---
12	12.5	9.6	9.4	7.7	---	---	---	---	---	---	---	---
13	11.4	9.0	9.3	7.5	---	---	---	---	---	---	---	---
14	11.7	8.9	9.0	7.0	---	---	---	---	---	---	---	---
15	11.6	8.6	9.0	7.2	9.0	7.6	---	---	---	---	---	---
16	11.4	8.8	9.1	7.0	9.2	7.9	---	---	---	---	---	---
17	11.1	7.7	9.3	6.6	9.2	7.3	---	---	7.9	7.5	---	---
18	9.8	8.0	8.5	7.4	9.2	7.2	---	---	8.6	6.9	---	---
19	11.6	8.7	9.2	7.1	9.1	7.6	---	---	8.1	6.6	---	---
20	---	---	8.9	6.9	9.0	7.2	---	---	7.5	7.0	8.3	7.3
21	---	---	8.5	7.4	9.1	7.1	---	---	8.2	7.3	8.6	7.1
22	---	---	8.7	6.5	9.4	7.1	---	---	8.8	6.9	8.5	6.8
23	9.9	9.4	8.3	6.3	9.3	6.9	---	---	8.1	6.9	8.1	6.2
24	10.4	9.6	8.5	7.0	9.1	6.9	---	---	---	---	7.7	6.8
25	---	---	8.7	7.0	8.5	7.2	8.7	7.2	---	---	8.4	6.5
26	---	---	8.9	6.8	8.5	6.9	8.6	7.7	---	---	8.7	7.1
27	10.7	10.0	8.4	6.5	8.5	6.3	9.0	7.7	---	---	9.0	7.1
28	11.9	10.4	8.5	6.4	9.4	6.8	8.7	6.8	---	---	8.9	7.2
29	11.7	10.2	---	---	8.7	6.5	8.3	6.5	---	---	9.2	7.0
30	11.1	10.4	---	---	---	---	---	---	---	---	8.6	6.5
31	---	---	---	---	---	---	---	---	---	---	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	41		16	43	---	18	33	258	23
2	41		16	41	---	18	34	---	23
3	41		17	40	---	18	34	---	23
4	41		20	38	---	18	35	---	23
5	40		25	38	---	18	35	---	23
6	42		23	39	---	20	34	---	28
7	42		23	40	---	20	34	259	24
8	40		25	43	280	33	32	---	22
9	39		23	40	107	12	30	---	20
10	38		20	41	---	17	30	---	20
11	37		20	39	---	20	30	---	20
12	41		22	39	---	15	28	---	20
13	51		25	33	---	10	28	---	20
14	55		30	39	---	15	26	---	20
15	54		25	37	---	15	26	---	20
16	51		25	35	---	15	26	---	22
17	49		20	35	182	17	24	---	20
18	49		20	36	---	18	22	---	18
19	48		23	36	---	18	23	---	18
20	47		23	34	---	16	22	---	18
21	47		23	38	---	25	22	---	18
22	48		23	34	---	15	22	---	18
23	48		23	35	---	20	22	---	20
24	48		23	33	---	16	22	---	20
25	48		23	35	---	16	22	---	20
26	52		28	36	---	16	20	---	20
27	45		25	36	---	16	20	---	20
28	42		20	36	---	20	21	---	20
29	41		20	40	---	25	22	---	20
30	40		20	40	---	25	22	---	22
31	41		20	---	---	---	22	---	22
TOTAL	1387		689	1129	---	545	823	---	645
		JANUARY			FEBRUARY			MARCH	
1	24	---	24	26	---	22	27	208	15
2	24	---	24	26	400	28	28	---	16
3	24	---	26	26	---	24	29	---	18
4	24	405	26	26	---	16	28	---	16
5	24	---	24	26	---	16	28	---	16
6	24	---	20	26	---	18	31	220	18
7	26	---	22	26	---	20	32	240	21
8	26	---	22	26	---	16	30	---	20
9	26	---	24	26	---	18	31	---	20
10	26	400	28	26	---	22	32	---	22
11	26	---	24	26	---	20	33	---	24
12	28	---	18	26	---	25	36	---	28
13	28	---	26	26	---	22	36	300	29
14	30	---	20	27	---	22	35	---	28
15	28	---	21	26	---	21	36	---	30
16	28	---	26	26	---	28	37	---	34
17	28	---	20	26	---	21	37	---	34
18	28	---	20	26	---	22	37	---	36
19	28	---	20	26	---	22	37	---	38
20	28	260	20	26	---	24	38	---	40
21	28	---	21	26	---	24	41	420	46
22	28	---	21	27	---	24	40	370	40
23	28	---	21	27	313	23	40	370	40
24	28	---	22	27	---	26	40	380	41
25	28	---	22	27	---	22	42	380	43
26	28	---	24	27	---	20	41	---	45
27	28	---	28	27	---	22	43	400	46
28	28	---	24	27	---	20	41	---	45
29	28	---	20	27	---	18	41	---	45
30	28	---	16	---	---	---	40	---	45
31	28	---	18	---	---	---	40	---	45
TOTAL	836	---	692	763	---	626	1107	---	984

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	41	---	45	125	---	1260	152	---	1230
2	40	---	45	143	---	2500	142	---	960
3	40	760	82	158	6500	2770	131	---	880
4	40	---	86	162	2230	975	130	---	1050
5	41	---	90	181	2750	1340	137	---	1290
6	41	---	100	202	2750	1500	141	---	1520
7	42	---	120	206	2250	1250	290	7640	5980
8	57	1580	257	210	2500	1420	243	5430	3560
9	78	2420	526	214	4000	2310	206	3480	1940
10	62	2060	344	249	6000	4030	192	---	1560
11	61	1380	230	291	9500	7460	182	---	1470
12	57	812	127	357	---	9000	174	---	1410
13	56	---	120	393	---	9500	169	---	1370
14	55	---	140	409	9600	10600	157	---	1270
15	55	---	140	413	12500	13900	156	---	1260
16	90	2330	600	426	10300	11800	143	---	1160
17	121	3540	1180	367	---	9000	138	---	1120
18	150	4680	1920	314	---	7500	135	---	1090
19	166	---	3000	288	---	6000	126	3570	1210
20	150	---	2700	262	---	4500	113	2400	732
21	116	---	2000	260	---	4000	107	2660	768
22	106	---	2300	246	---	3500	105	1620	459
23	108	8750	2550	235	---	2500	101	1710	466
24	126	6250	2130	239	3000	1940	96	1700	441
25	145	4000	1570	230	2500	1550	99	---	400
26	146	4750	1870	209	4500	2540	103	---	470
27	129	---	1100	193	3750	1950	99	---	400
28	128	---	1800	183	---	1730	94	935	237
29	119	---	1360	164	---	1330	90	780	190
30	119	---	1280	151	---	1020	93	420	105
31	---	---	---	144	---	1800	---	---	---
TOTAL	2685	---	29812	7624	---	132475	4244	---	35998
		JULY			AUGUST			SEPTEMBER	
1	99	1620	433	85	740	195	55	---	50
2	88	1470	349	78	860	181	54	---	40
3	94	1490	378	76	840	172	51	---	40
4	100	1470	397	84	1490	338	50	---	40
5	92	1350	335	77	1200	249	50	---	40
6	76	840	172	76	630	129	48	---	35
7	76	675	139	75	663	134	45	---	35
8	76	390	80	72	---	130	45	---	35
9	75	315	64	71	---	130	43	---	35
10	118	8430	2980	70	---	130	43	---	35
11	102	4650	1280	69	---	140	43	---	35
12	90	2630	639	69	---	140	43	286	33
13	86	1800	418	68	---	150	42	305	35
14	88	1500	356	69	---	200	40	273	29
15	84	1200	272	63	---	175	39	228	24
16	81	1280	280	67	---	300	43	260	30
17	75	825	167	62	---	170	40	244	26
18	73	825	163	58	---	150	39	260	27
19	72	600	117	56	---	130	37	162	16
20	72	570	111	66	---	110	38	146	15
21	68	630	116	63	596	101	37	143	14
22	69	660	123	59	585	93	37	162	16
23	70	---	130	57	490	75	36	156	15
24	75	---	170	57	618	95	40	169	18
25	77	---	190	56	325	49	39	156	16
26	75	1020	207	55	273	41	35	143	14
27	75	1080	219	54	260	38	35	150	14
28	75	930	188	53	305	44	35	136	13
29	74	660	132	51	273	38	36	110	11
30	74	660	132	50	---	35	35	---	13
31	75	540	109	49	---	35	---	---	---
TOTAL	2524	---	10846	2015	---	4097	1253	---	799
YEAR	26390		218208						

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft downstream from Ryan Gulch, and 23 mi northwest of Rio Blanco.

DRAINAGE AREA.--506 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft, from topographic map.

REMARKS.--Records good. Diversions for irrigation above station.

AVERAGE DISCHARGE.--20 years, 26.1 ft^3/s; 18,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 525 ft^3/s, May 16, 1984, gage height, 7.74 ft; maximum gage height, 7.81 ft, May 28, 1983; minimum daily discharge, 0.15 ft^3/s, June 7, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 19	1200	181	5.10	July 10	1800	135	4.89
Apr. 26	1200	168	4.90	July 18	2200	304	5.67
May 16	1500	*525	7.74	Aug. 01	2200	151	5.13
June 07	2100	310	6.61	Aug. 16	2030	131	4.90

Minimum daily discharge, 32 ft^3/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	48	59	63	41	38	50	134	172	118	110	80
2	60	48	59	63	39	38	51	140	168	115	116	78
3	61	48	59	65	39	40	49	168	151	113	108	76
4	59	48	59	65	39	38	47	172	145	112	114	75
5	55	48	59	65	37	35	50	189	147	107	108	74
6	54	48	59	65	37	38	54	212	152	94	109	73
7	53	48	59	65	37	37	57	221	265	92	108	72
8	52	53	59	63	37	39	64	221	255	86	102	71
9	50	55	59	63	37	40	86	226	216	83	98	70
10	50	55	59	63	35	42	78	250	198	117	95	69
11	50	55	59	61	32	43	80	290	191	122	93	67
12	49	55	61	61	33	44	71	372	183	109	93	66
13	51	55	61	59	35	53	71	416	182	106	92	65
14	55	55	61	59	39	55	68	424	176	108	97	61
15	56	55	61	57	38	56	71	492	166	107	88	60
16	54	55	61	57	37	59	85	516	164	103	96	65
17	52	55	61	55	37	55	108	483	159	89	95	65
18	52	55	61	55	38	54	145	432	162	100	89	61
19	52	55	61	53	36	49	162	382	151	96	88	59
20	52	57	61	53	35	50	158	342	139	91	101	63
21	52	57	61	51	37	56	126	320	135	84	103	60
22	52	57	61	51	39	67	111	299	134	82	92	60
23	51	57	63	49	37	67	112	276	134	85	89	58
24	50	57	63	49	38	68	125	258	125	92	89	58
25	50	57	63	47	37	66	146	245	125	94	87	60
26	51	57	63	47	37	57	167	229	134	91	85	59
27	51	57	63	45	35	48	156	212	129	93	83	59
28	50	57	63	45	36	46	147	200	125	92	81	57
29	50	57	63	43	38	47	136	188	119	91	87	57
30	49	57	63	43	---	47	129	175	114	93	85	57
31	49	---	63	41	---	47	---	165	---	96	82	---
TOTAL	1627	1621	1887	1721	1072	1519	2960	8649	4816	3061	2963	1955
MEAN	52.5	54.0	60.9	55.5	37.0	49.0	98.7	279	161	98.7	95.6	65.2
MAX	61	57	63	65	41	68	167	516	265	122	116	80
MIN	49	48	59	41	32	35	47	134	114	82	81	57
AC-FT	3230	3220	3740	3410	2130	3010	5870	17160	9550	6070	5880	3880

CAL YR 1983 TOTAL 28976 MEAN 79.4 MAX 464 MIN 14 AC-FT 57470
WTR YR 1984 TOTAL 33851 MEAN 92.5 MAX 516 MIN 32 AC-FT 67140

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to September 1982.
WATER TEMPERATURE: December 1979 to September 1982.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1983.

INSTRUMENTATION.--Automatic pumping sediment sampler October 1972 to September 1983. Water-quality monitor December 1979 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 2,920 micromhos July 18, 1981; minimum, 520 micromhos July 18, 1981.
WATER TEMPERATURES: Maximum 26.5°C June 22, 1981; minimum, 0.0°C many days during the winter period.
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979, several days in Sept. 1981.
SEDIMENT LOADS: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton Sept. 27, 30, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC											
06...	1205	59	--	8.6	.0	11.2	2.0	520	86	74	150
JAN											
26...	1300	47	1250	8.6	.0	12.5	--	460	78	64	130
APR											
13...	1320	71	1200	8.6	9.0	9.6	1.6	420	75	56	120
MAY											
23...	1335	276	966	8.4	13.5	8.6	3.5	380	77	44	78
JUN											
21...	1355	142	1190	8.4	15.5	8.5	--	450	81	59	110
SEP											
11...	1300	67	1330	8.4	12.0	9.2	--	450	70	67	130

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
DEC											
06...	3	2.1	473	330	15	.80	17	970	1.3	154	--
JAN											
26...	3	1.9	412	300	12	.90	15	850	1.2	108	--
APR											
13...	3	2.4	398	280	16	.70	14	800	1.1	154	--
MAY											
23...	2	1.9	298	210	11	.40	16	620	.84	461	3290
JUN											
21...	2	2.6	311	260	13	.60	17	730	.99	281	--
SEP											
11...	3	2.3	329	320	14	.60	17	820	1.1	149	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
DEC										
06...	1.1	.010	1.1	.050	.85	.90	.010	.020	160	2900
JAN										
26...	--	<.010	1.0	.060	--	<.20	.010	.030	150	2500
APR										
13...	1.1	.010	1.1	.050	.45	.50	.040	.030	130	1800
MAY										
23...	2.3	.010	2.3	.130	1.1	1.2	.030	.030	80	1300
JUN										
21...	--	<.010	1.6	.030	.67	.70	.010	.030	130	1900
SEP										
11...	--	<.010	1.5	.030	.17	.20	.010	.020	170	2500

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC									
06...	2	93	<1	7	27	28	6	2	8
MAY									
23...	3	100	<1	7	25	9	11	<1	10

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAR				
20...	1515	46	1320	9.5
MAY				
09...	1010	227	1010	16.0
11...	1415	294	910	16.5
16...	1130	523	800	12.0
JUN				
21...	1355	142	1190	15.5
AUG				
13...	1310	92	1230	17.5
SEP				
12...	1100	66	1300	13.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC				
06...	1205	59	410	65
JAN				
26...	1300	47	398	51
APR				
13...	1320	71	1340	257
MAY				
23...	1335	276	5720	4260
SEP				
11...	1300	67	523	95

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to September 1983.
WATER TEMPERATURES: January 1971 to September 1974, May 1975 to September 1983.
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to September 1983.

INSTRUMENTATION.--Water-quality monitor May 1974 to September 1983. Pumping sediment sampler March 1974 to September 1983.

REMARKS.--Maximum and minimum values of specific conductance available in district office. Specific conductance values of 10,000 micromhos represent values of 10,000 micromhos or higher due to instrument limitations.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 10,000 micromhos June 18, 1981; minimum, 460 micromhos February 28 and March 2, 1983.
WATER TEMPERATURES: Maximum, 32.0°C July 14, 1978; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L estimated Sept. 7, 1978; 4 mg/L Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 6,095 tons estimated May 28, 1983; minimum daily, 0.10 ton June 22, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
DEC 06...	1320	45	--	8.7	.0	10.1	2.0	480	73	72	240
JAN 26...	1445	34	1510	8.6	.0	13.0	1.3	460	71	67	220
APR 13...	1600	65	1420	8.6	12.0	8.8	1.9	390	61	58	190
MAY 23...	1450	256	1040	8.5	18.0	7.2	2.6	360	71	45	97
JUN 21...	1455	150	1280	8.5	18.5	7.5	--	420	70	58	150
SEP 10...	1100	96	1440	8.5	12.5	9.0	--	450	66	68	180

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
DEC 06...	5	2.2	640	340	29	1.0	16	1200	1.6	142
JAN 26...	5	2.1	566	310	25	1.1	15	1100	1.4	97
APR 13...	4	2.6	491	290	25	.90	14	940	1.3	165
MAY 23...	2	2.3	325	230	14	.40	16	670	.91	465
JUN 21...	3	2.8	403	280	18	.60	17	840	1.1	340
SEP 10...	4	2.5	449	330	22	.80	21	960	1.3	249

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
DEC 06...	1.1	.020	1.1	.100	.80	.90	.030	.040	220	2400
JAN 26...	1.1	.010	1.1	.090	.11	.20	.030	.050	220	2300
APR 13...	1.2	.010	1.2	.070	.63	.70	.050	.040	180	1800
MAY 23...	2.0	.010	2.0	.140	.46	.60	.060	.050	100	1300
JUN 21...	--	<.010	1.9	.030	.77	.80	.020	.030	150	1800
SEP 10...	--	<.010	1.7	.030	.37	.40	.050	.030	210	2300

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC										
06...	1320	3	98	<1	6	39	8	7	2	7
MAY										
23...	1450	2	110	<1	8	28	6	12	2	9

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
NOV				
01...	1530	59	1500	9.5
MAR				
29...	1445	63	1700	8.5
APR				
12...	1505	71	1510	9.0
APR				
19...	1420	211	925	11.0
MAY				
11...	1545	276	1000	17.0
16...	1305	513	900	13.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC				
06...	1320	45	135	16
JAN				
26...	1445	34	215	20
APR				
13...	1600	65	2380	418
SEP				
10...	1100	96	446	116

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft upstream from mouth, 1.0 mi west of White River City, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR-CO-82-3: drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,705 ft, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi upstream at different datums.

REMARKS.--Records fair except those for winter period , which are poor. Diversions for irrigation of about 5,500 acres above station.

AVERAGE DISCHARGE.--16 years, 33.5 ft^3/s; 24,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft^3/s, Sept. 7, 1978, gage height, 7.04 ft, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft^3/s, July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	2130	*518	6.34	June 8	0200	394	6.05

Minimum daily discharge, 18 ft^3/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	60	49	48	26	40	59	145	186	136	119	98
2	76	58	48	48	24	40	57	151	191	135	137	96
3	76	56	47	50	24	40	56	171	176	135	122	94
4	72	56	47	50	24	42	54	171	176	135	123	91
5	67	56	46	50	22	44	54	189	177	136	116	88
6	66	56	45	50	22	46	54	201	197	127	117	86
7	36	55	44	50	22	47	54	206	290	125	118	84
8	62	58	46	50	22	49	59	200	358	125	112	81
9	61	58	46	48	22	50	76	197	284	129	110	78
10	61	56	46	48	20	55	75	211	249	137	106	76
11	60	57	46	48	18	65	72	270	220	148	102	73
12	59	57	46	46	19	62	65	340	196	139	101	70
13	60	56	46	46	21	70	65	384	189	131	102	68
14	60	55	46	44	25	90	66	434	180	133	103	66
15	60	55	45	44	24	83	69	470	170	129	97	68
16	60	53	45	42	23	88	83	506	177	129	110	68
17	60	54	47	42	23	78	108	484	177	121	117	68
18	60	55	48	42	24	74	146	431	176	118	114	67
19	60	54	45	40	24	67	195	357	169	132	107	69
20	60	52	46	40	24	71	222	309	156	117	127	70
21	60	52	46	38	26	87	207	288	150	114	122	71
22	60	52	46	38	28	91	165	273	150	110	111	73
23	60	48	48	36	27	81	166	256	151	109	96	70
24	60	49	48	36	28	84	173	246	145	113	104	69
25	60	49	48	34	27	85	186	247	142	117	101	72
26	60	50	48	34	27	69	207	240	146	115	99	70
27	60	49	48	32	30	66	192	221	145	114	101	70
28	60	48	48	32	36	64	175	203	142	114	99	69
29	60	48	48	30	38	64	161	185	140	114	97	69
30	60	47	48	30	---	64	149	177	135	113	98	70
31	60	---	48	28	---	62	---	165	---	119	95	---
TOTAL	1872	1609	1448	1294	720	2018	3470	8328	5540	3869	3383	2262
MEAN	60.4	53.6	46.7	41.7	24.8	65.1	116	269	185	125	109	75.4
MAX	76	60	49	50	38	91	222	506	358	148	137	98
MIN	36	47	44	28	18	40	54	145	135	109	95	66
AC-FT	3710	3190	2870	2570	1430	4000	6880	16520	10990	7670	6710	4490

CAL YR 1983	TOTAL	35345	MEAN	96.8	MAX	525	MIN	16	AC-FT	70110
WTR YR 1984	TOTAL	35813	MEAN	97.8	MAX	506	MIN	18	AC-FT	71040

09306224 WHITE RIVER ABOVE CROOKED WASH, NEAR WHITE RIVER CITY, CO

LOCATION.--Lat 40°09'44", long 108°20'33", in NW¼NW¼ sec.12, T.2 N., R.98 W., Rio Blanco county, Hydrologic Unit 14050005, on right bank 15 ft upstream from County Road 77 bridge, 2.8 mi upstream from Crooked Wash, 9.8 mi downstream from Piceance Creek and 8.0 mi northwest of White River City.

DRAINAGE AREA.--1,821 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft, from topographic map. Oct. 1, 1982 to Aug. 15, 1983, at site 0.25 mi upstream, at datum 3.12 ft, higher.

REMARKS.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 31,900 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,370 ft^3/s June 7, 1984, gage height 8.05 ft; minimum daily, 300 ft^3/s, Jan. 1-7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,370 ft^3/s at 1700 June 7, gage height, 8.05 ft; minimum daily, 360 ft^3/s, Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	570	529	480	445	395	592	938	5080	3750	1640	960
2	638	570	604	475	445	405	576	1130	5420	3510	1670	885
3	691	570	548	475	440	410	525	1300	4650	3380	1580	795
4	709	564	529	475	440	415	523	1170	4600	3230	1550	766
5	678	559	524	475	440	425	574	1230	4550	3060	1530	744
6	674	558	484	475	430	435	654	1290	4730	2830	1600	708
7	645	555	474	470	430	450	691	1250	5600	2700	1550	692
8	628	599	502	470	430	460	691	1220	5960	2580	1420	683
9	622	644	511	480	430	480	831	1310	5280	2660	1250	669
10	615	590	510	440	430	485	720	1670	4630	2880	1220	663
11	629	586	507	470	425	495	783	3530	4530	2570	1210	723
12	634	586	502	480	425	500	722	3690	4470	2240	1190	705
13	623	586	502	465	425	525	622	3710	4390	2090	1120	697
14	689	586	510	490	425	525	577	3540	4470	2160	1060	650
15	694	578	520	480	425	540	589	3990	4680	2060	1000	663
16	652	547	540	515	425	560	1190	4550	4890	1970	1120	766
17	627	563	500	455	425	545	1430	4790	4980	1820	1100	725
18	623	574	545	450	425	565	1410	4960	4780	1710	1050	670
19	627	574	515	445	425	540	1360	4640	4470	1670	1190	648
20	623	574	530	445	425	565	1250	4410	4550	1570	1270	665
21	609	574	465	445	420	590	1030	4930	4490	1550	1290	782
22	606	572	470	445	430	625	888	5170	4530	1540	1150	750
23	600	530	500	445	390	600	854	5200	4500	1490	1070	707
24	598	510	495	445	390	610	955	5300	4230	1570	1120	772
25	595	551	515	445	400	630	1190	5460	4040	1830	1060	766
26	588	576	520	445	385	590	1280	5410	3960	1770	1020	741
27	583	536	510	445	360	595	1080	5090	3780	1750	1000	722
28	579	522	480	445	385	585	1020	4760	3760	1570	941	762
29	573	532	485	445	390	634	954	4330	3740	1540	889	803
30	570	526	495	445	---	562	933	4350	3690	1530	830	862
31	566	---	480	445	---	556	---	4520	---	1670	805	---
TOTAL	19380	16962	15801	14305	12160	16297	26494	108838	137430	68250	37495	22144
MEAN	625	565	510	461	419	526	883	3511	4581	2202	1210	738
MAX	709	644	604	515	445	634	1430	5460	5960	3750	1670	960
MIN	566	510	465	440	360	395	523	938	3690	1490	805	648
AC-FT	38440	33640	31340	28370	24120	32330	52550	215900	272600	135400	74370	43920

CAL YR 1983 TOTAL 389381 MEAN 1067 MAX 5600 MIN 300 AC-FT 772300
WTR YR 1984 TOTAL 495556 MEAN 1354 MAX 5960 MIN 360 AC-FT 982900

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY,CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC 07...	1110	474	--	8.7	.0	12.0	.36	300	75	26	40
APR 11...	1305	783	868	8.4	6.5	9.7	.82	310	71	32	59
JUN 07...	1410	5600	437	8.3	9.0	9.1	--	180	43	17	25

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC 07...	1	1.4	191	160	12	.20	15	450	.60	570
APR 11...	2	2.0	209	240	14	.30	12	560	.76	1180
JUN 07...	.8	2.1	123	95	5.9	.20	11	270	.37	4140

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
DEC 07...	--	<.010	.16	.030	.17	.20	.030	.010	40	880
APR 11...	--	<.010	.42	.080	.32	.40	.010	.030	60	850
JUN 07...	.48	.010	.49	.060	.94	1.0	.060	.020	30	380

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
JUN 07...	<1	51	<1	<10	3	11	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 07...	19	<.1	1	<1	2	<1	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 07...	1110	474	110	141
APR 11...	1305	783	1110	2350
JUN 07...	1410	5600	3300	49900

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi downstream from Water Gulch and 19 mi southeast of Rangely.

DRAINAGE AREA.--8.61 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Altitude of gage is 6,975 ft, from topographic map.

REMARKS.--Records good except those above 28 ft^3/s, which are fair.

AVERAGE DISCHARGE.--10 years, 0.89 ft^3/s; 645 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 272 ft^3/s, July 23, 1977, gage height, 3.20 ft, maximum gage height, 13.50 ft, May 31, 1983 (from mud flow); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 136 ft^3/s at 1430 May 17, gage height, 2.92 ft; minimum daily, 0.42 ft^3/s, Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.74	.77	.65	.56	.51	1.1	6.4	13	6.4	3.7	1.5
2	1.6	.72	.78	.61	.47	.52	1.1	7.0	14	6.2	4.1	1.5
3	1.4	.71	.72	.66	.51	.52	1.1	7.6	13	5.7	3.3	1.4
4	1.3	.72	.70	.56	.51	.72	1.1	7.3	13	5.5	3.2	1.4
5	1.4	.74	.75	.56	.51	.58	1.1	9.1	14	5.4	3.1	1.4
6	1.4	.75	.76	.51	.51	.58	1.1	9.4	14	5.2	3.1	1.4
7	1.5	.76	.77	.51	.51	.53	1.2	11	14	5.0	3.0	1.3
8	1.3	.85	1.0	.56	.50	.58	1.1	11	14	5.0	3.0	1.2
9	1.3	.86	.85	.51	.50	.49	1.2	11	14	5.1	2.9	1.2
10	1.3	.67	.85	.51	.52	.54	1.2	11	14	4.9	2.9	1.2
11	1.3	.74	.77	.56	1.4	.49	1.2	12	14	4.7	3.1	1.8
12	1.2	.69	.84	.56	1.2	.54	1.2	15	14	4.6	3.0	1.5
13	1.2	.76	.76	.56	.47	.55	1.2	17	15	4.4	3.0	1.5
14	1.3	.70	.75	.61	.53	.55	1.2	20	15	4.2	3.0	1.5
15	1.1	.66	.82	.62	1.1	.60	1.2	28	15	4.1	2.8	1.4
16	1.1	.67	.80	.60	.43	.77	1.2	33	14	4.1	3.3	1.5
17	1.1	.63	.81	.58	.48	.70	1.3	42	14	3.8	3.0	1.3
18	1.1	.69	.80	.56	.44	.61	2.3	33	13	3.7	2.7	1.3
19	1.1	.70	.80	.56	.49	.71	2.1	26	13	3.7	3.0	1.3
20	1.1	.71	.75	.54	.54	.86	3.1	24	13	3.8	3.3	1.4
21	1.0	.72	.75	.54	.54	.79	3.7	29	12	3.8	2.7	1.8
22	.96	.75	.75	.54	.50	.87	3.9	26	11	3.8	2.4	1.2
23	.94	.75	.70	.52	.55	.87	4.3	25	10	3.7	2.4	1.2
24	.93	.80	.70	.52	.50	.87	4.8	24	9.9	3.7	2.1	1.2
25	.84	.77	.70	.50	.50	.95	5.2	22	9.2	3.6	2.2	1.3
26	.90	.51	.69	.47	.51	1.0	5.5	20	8.9	3.8	2.1	1.2
27	.88	.52	.69	.42	1.4	1.0	5.9	18	8.6	3.7	1.9	1.3
28	.80	.58	.49	.47	.51	.96	5.9	16	7.9	3.7	1.8	1.2
29	.78	.60	.44	.51	.51	.97	5.9	15	7.3	3.6	1.6	1.2
30	.84	.65	.58	.51	---	1.0	6.2	14	7.0	3.6	1.6	1.2
31	.75	---	.68	.51	---	.98	---	13	---	3.7	1.5	---
TOTAL	35.12	21.12	23.02	16.90	17.70	22.21	78.6	562.8	368.8	136.2	84.8	40.8
MEAN	1.13	.70	.74	.55	.61	.72	2.62	18.2	12.3	4.39	2.74	1.36
MAX	1.6	.86	1.0	.66	1.4	1.0	6.2	42	15	6.4	4.1	1.8
MIN	.75	.51	.44	.42	.43	.49	1.1	6.4	7.0	3.6	1.5	1.2
AC-FT	70	42	46	34	35	44	156	1120	732	270	168	81

CAL YR 1983 TOTAL 1259.89 MEAN 3.45 MAX 78 MIN .00 AC-FT 2500
WTR YR 1984 TOTAL 1408.07 MEAN 3.85 MAX 42 MIN .42 AC-FT 2790

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 6,490 micromhos Dec. 19, 1981; minimum, 230 micromhos Mar. 20, 1978.
WATER TEMPERATURES: Maximum, 33.5°C June 11, 1981; minimum, 0.0°C many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 17,800 mg/L July 26, 1981; no flow many days during 1974-78, 1981.
SEDIMENT LOADS: Maximum daily, 162 tons May 20, 1979; no flow many days during 1974-78, Dec. 15, 1979, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 23.5°C August 13, 14, 27; minimum 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAY										
22...	1310	26	1550	8.4	13.5	8.2	11	740	150	87
SEP										
11...	1030	2.6	1730	8.4	10.0	9.1	--	790	160	94

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY										
22...	110	2	1.9	318	520	21	.10	23	1230	1100
SEP										
11...	130	2	1.5	265	610	28	.20	20	1140	1200

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
MAY									
22...	1.5	78	<.010	8.4	.050	2.6	2.6	.020	.080
SEP									
11...	1.6	8.5	<.010	8.0	.050	.95	1.0	.010	<.010

DATE	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)
MAY									
22...	14	4	100	<3	<.1	30	9	2300	<6
SEP									
11...	15	3	110	<3	<.1	24	17	3000	2

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR				
05...	1310	1.1	572	1.7
26...	1613	5.8	7720	120
MAY				
09...	1350	11	3030	90
15...	1410	29	15400	1220
22...	1310	26	10100	709
23...	1100	25	5580	371
JUN				
12...	1100	14	1240	47
SEP				
11...	1030	2.6	29	.20

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	1430	1360	1360	1360	1400	1290	---	1460	1540	---	---
2	1370	1420	1350	1400	1370	1400	1350	---	1420	1530	---	---
3	1400	1420	1350	1370	1360	1410	1390	---	1410	1590	---	---
4	1420	1390	1340	1360	1350	1410	1400	---	1400	1630	---	---
5	1410	1390	1400	1370	1360	1430	1430	---	---	1640	---	---
6	1390	1390	1410	1380	1360	1440	1450	---	---	1640	---	---
7	1400	1390	1360	1380	1340	1440	1450	---	---	1640	---	---
8	1400	1330	1360	1370	1340	1440	1460	---	---	1640	---	---
9	1400	1400	1380	1370	1300	1430	1450	1420	---	1620	---	---
10	1400	1380	1370	1380	1320	1450	1460	1340	---	1610	---	---
11	1400	1390	1370	1360	1330	1460	1470	1380	---	1560	1720	1400
12	1410	1380	1370	1370	1340	1460	1480	---	1410	1520	1720	1580
13	1400	1370	1380	1370	1320	1350	1480	---	1390	1500	1660	1610
14	1370	1380	1370	1350	1310	1340	1480	---	1360	1510	1610	1610
15	1420	1380	1360	1380	1350	1420	1480	1520	1390	1510	1600	1600
16	1420	1380	1370	1360	1360	1380	1480	---	1430	1500	1500	1560
17	1420	1380	1350	1370	1320	1420	1480	---	1460	1490	---	1600
18	1410	1360	1350	1390	1370	1430	1410	---	1490	1480	---	1610
19	1430	1360	1350	1370	1400	1460	---	---	1520	1480	---	1600
20	1430	1350	1360	1370	1400	1390	---	---	1520	1480	---	1560
21	1420	1330	1400	1360	1380	1370	---	---	1550	1480	---	1450
22	1420	1390	1370	1360	1370	1390	---	---	1560	1470	---	---
23	1430	1440	1360	1350	1390	1390	---	---	1560	1470	---	---
24	1420	1380	1360	1340	1380	1390	---	---	1560	1480	---	---
25	1430	1360	1350	1340	1380	1390	---	---	1560	1470	---	---
26	1440	1380	1330	1330	1390	1380	1310	---	1560	1450	---	---
27	1430	1370	1330	1350	1400	1370	---	---	1560	---	---	---
28	1430	1370	1380	1360	1410	1370	---	---	1560	---	---	---
29	1430	1360	1380	1360	1410	1360	---	---	1550	---	---	---
30	1420	1360	1350	1370	---	1370	---	1530	1540	---	---	---
31	1420	---	1350	1370	---	1330	---	1510	---	---	---	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	6.5	11.5	4.0	4.5	1.0	1.0	.0	3.5	.0	6.0	.5
2	9.5	5.5	10.5	4.0	6.0	2.0	.0	.0	2.0	.0	7.0	.5
3	11.0	5.5	11.0	3.5	4.0	.5	1.5	.0	2.5	.0	6.0	.5
4	15.0	4.0	10.5	3.0	2.0	.5	3.0	.5	3.0	.0	---	---
5	15.5	5.0	11.0	3.0	1.0	.5	3.0	.5	3.0	.0	---	---
6	16.0	5.5	10.0	3.0	1.0	.5	3.0	.5	3.0	.0	---	---
7	14.5	5.5	11.0	3.0	3.0	.5	3.0	.5	3.0	.0	---	---
8	13.5	5.5	7.0	.5	4.0	1.5	3.0	.0	4.5	.0	---	---
9	14.5	6.5	5.0	.5	4.5	1.0	2.5	.0	3.5	.0	---	---
10	13.0	6.5	8.5	2.0	4.0	2.0	2.0	.0	4.0	.5	---	---
11	12.0	4.5	7.0	1.0	4.5	.5	3.0	.0	3.5	.5	---	---
12	13.0	3.5	9.0	3.0	3.5	.5	2.0	.0	3.0	1.0	---	---
13	13.5	4.0	6.0	.5	3.0	.0	3.0	.0	5.5	1.5	---	---
14	10.0	5.5	5.0	.5	3.5	.0	3.5	.0	3.0	.5	---	---
15	11.0	3.0	6.5	.5	3.5	.0	.5	.0	---	---	---	---
16	13.0	3.0	6.0	.5	3.0	.0	.5	.0	---	---	---	---
17	12.0	3.5	7.0	1.5	4.5	1.0	.0	.0	---	---	---	---
18	12.0	5.0	6.5	1.5	4.0	1.5	.0	.0	---	---	---	---
19	10.5	2.0	4.5	.5	4.5	.0	.0	.0	---	---	---	---
20	11.5	2.0	4.5	1.5	1.5	.0	.0	.0	---	---	13.5	1.5
21	12.0	2.0	4.5	.5	.0	.0	1.5	.0	3.0	1.0	15.5	.0
22	12.0	3.0	3.5	.5	2.5	.0	2.5	.5	4.0	.5	8.0	.0
23	12.0	3.0	1.5	.5	2.0	.5	2.0	.5	3.0	.5	11.0	1.5
24	8.5	3.0	4.5	.5	2.0	.5	3.0	.0	4.0	1.0	13.5	.5
25	11.0	2.0	4.5	1.5	3.0	.5	3.5	1.0	3.0	.5	11.5	.0
26	11.0	2.5	1.0	.5	4.0	.5	3.5	.0	3.5	.5	8.5	1.0
27	10.5	3.0	2.5	.5	3.5	1.0	3.0	.0	3.0	.5	8.5	.0
28	11.0	3.0	3.5	1.0	1.0	.0	3.0	.0	4.5	.0	12.5	.0
29	11.0	3.0	2.5	.5	.0	.0	3.0	.0	5.5	.0	11.0	2.0
30	11.5	3.0	4.0	.5	3.0	.0	2.5	.0	---	---	8.0	1.0
31	11.5	5.0	---	---	4.5	1.0	2.5	.0	---	---	12.0	2.5
MONTH	16.0	2.0	11.5	.5	6.0	.0	3.5	.0	5.5	.0	15.5	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	2.0	11.5	5.5	13.0	7.5	20.0	8.5	---	---	---	---
2	10.5	1.5	15.0	4.0	15.5	6.5	20.0	8.0	---	---	---	---
3	13.5	1.5	12.0	4.5	15.0	7.0	20.0	7.5	---	---	---	---
4	15.0	.0	11.0	5.0	14.5	6.0	20.0	7.0	---	---	---	---
5	16.0	2.0	14.0	5.5	10.5	7.0	20.5	7.0	---	---	---	---
6	15.0	3.5	11.5	5.0	10.0	6.0	21.0	7.0	---	---	---	---
7	16.0	3.0	12.0	4.5	14.5	3.0	21.0	8.5	---	---	---	---
8	17.5	2.0	14.5	4.5	8.0	5.5	19.5	9.5	---	---	---	---
9	10.0	1.0	14.5	5.0	14.0	6.0	20.5	9.5	---	---	---	---
10	15.5	.5	15.5	6.0	15.5	5.5	20.5	8.5	---	---	---	---
11	12.5	1.0	15.5	6.5	15.5	6.0	21.0	7.5	---	---	---	---
12	14.0	.0	15.5	7.0	16.0	6.5	21.0	8.0	---	---	---	---
13	17.0	1.5	14.5	7.0	15.5	7.0	16.5	9.0	23.5	13.5	---	---
14	18.0	.5	13.5	6.5	16.0	7.0	17.5	9.5	23.5	12.0	19.5	8.5
15	19.0	1.0	13.0	7.0	14.0	7.5	20.5	9.5	18.0	11.0	18.5	7.5
16	20.5	1.0	12.5	6.0	14.0	7.5	21.5	8.0	21.0	12.0	18.0	8.5
17	19.5	3.0	---	---	16.0	7.0	21.0	7.5	22.0	11.5	19.5	7.0
18	14.5	3.5	---	---	14.0	7.0	21.5	7.5	20.5	12.0	19.0	7.0
19	14.5	4.5	---	---	16.5	7.0	21.5	8.5	21.5	11.0	17.0	7.5
20	8.5	1.0	---	---	16.5	8.0	21.5	9.0	14.0	10.5	18.5	7.0
21	11.0	2.5	---	---	17.0	7.0	21.5	9.5	22.5	9.5	16.0	5.5
22	11.5	3.0	---	---	17.5	6.5	18.5	9.0	21.0	10.5	17.5	5.5
23	15.5	3.5	---	---	17.5	6.5	18.0	10.0	21.0	11.0	16.5	6.5
24	15.5	5.0	---	---	18.0	7.0	20.5	9.0	19.5	11.5	9.5	1.5
25	6.5	1.5	---	---	14.5	8.0	21.5	8.5	18.0	10.5	14.0	2.0
26	10.0	2.0	---	---	18.5	8.0	18.0	9.5	23.0	10.0	13.0	4.0
27	12.0	2.5	---	---	18.5	7.5	21.0	9.0	23.5	10.0	16.0	4.5
28	10.0	2.0	---	---	19.5	7.5	21.5	9.0	23.0	11.0	13.5	3.5
29	11.5	3.0	---	---	19.5	8.0	21.0	10.0	22.0	10.5	14.0	2.0
30	11.5	4.5	15.5	8.0	12.5	8.5	20.0	10.5	22.0	10.0	15.0	3.0
31	---	---	13.0	7.5	---	---	19.0	9.0	21.0	11.5	---	---
MONTH	20.5	.0	15.5	4.0	19.5	3.0	21.5	7.0	23.5	9.5	19.5	1.5
YEAR	23.5	.0										

09306240 BOX ELDER GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°53'18", long 108°31'40", in NE¼SW¼ sec.8, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 30 ft upstream from unnamed tributary, 4.1 mi upstream from mouth, and 20 mi southeast of Rangely.

DRAINAGE AREA.--9.21 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,955 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are good. No diversion or regulation above station.

AVERAGE DISCHARGE.--10 years, 0.90 ft^3/s; 652 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 332 ft^3/s, Sept. 7, 1981, gage height, 4.37 ft, result of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 97 ft^3/s at 1415 May 18, gage height, 3.05 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	10	18	4.6	.67	.00
2	.00	.00	.00	.00	.00	.00	.00	13	18	3.8	.98	.00
3	.00	.00	.00	.00	.00	.00	.00	15	17	3.8	.61	.00
4	.00	.00	.00	.00	.00	.00	.00	17	17	3.8	.51	.00
5	.00	.00	.00	.00	.00	.00	.00	18	16	3.3	.42	.00
6	.00	.00	.00	.00	.00	.00	.00	19	16	2.8	.38	.00
7	.00	.00	.00	.00	.00	.00	.00	19	15	2.3	.34	.00
8	.00	.00	.00	.00	.00	.00	.00	20	15	2.1	.31	.00
9	.00	.00	.00	.00	.00	.00	.00	21	14	2.2	.25	.00
10	.00	.00	.00	.00	.00	.00	.00	25	14	2.3	.22	.00
11	.00	.00	.00	.00	.00	.00	.00	30	13	1.9	.20	.00
12	.00	.00	.00	.00	.00	.00	.00	35	13	1.7	.15	.00
13	.00	.00	.00	.00	.00	.00	.00	40	13	1.6	.15	.00
14	.00	.00	.00	.00	.00	.00	.00	46	13	1.5	.17	.00
15	.00	.00	.00	.00	.00	.00	.17	57	13	1.3	.13	.00
16	.00	.00	.00	.00	.00	.00	1.1	64	13	1.1	.13	.00
17	.00	.00	.00	.00	.00	.00	3.4	69	13	.92	.13	.00
18	.00	.00	.00	.00	.00	.00	5.5	63	14	.79	.13	.00
19	.00	.00	.00	.00	.00	.00	7.7	42	15	.67	.13	.00
20	.00	.00	.00	.00	.00	.00	8.9	33	15	.61	.56	.00
21	.00	.00	.00	.00	.00	.00	8.3	29	16	.56	.10	.19
22	.00	.00	.00	.00	.00	.00	7.5	27	14	.51	.02	.02
23	.00	.00	.00	.00	.00	.00	6.9	26	13	.51	.00	.00
24	.00	.00	.00	.00	.00	.00	6.9	27	12	1.1	.00	.00
25	.00	.00	.00	.00	.00	.00	8.0	27	10	.70	.00	.00
26	.00	.00	.00	.00	.00	.00	8.1	21	9.5	.64	.00	.00
27	.00	.00	.00	.00	.00	.00	8.4	20	8.5	.58	.00	.00
28	.00	.00	.00	.00	.00	.00	8.5	18	7.4	.49	.00	.00
29	.00	.00	.00	.00	.00	.00	8.7	17	6.4	.40	.00	.00
30	.00	.00	.00	.00	---	.00	9.2	19	5.4	.68	.00	.00
31	.00	---	.00	.00	---	.00	---	19	---	.79	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	107.27	906	397.2	50.05	6.69	.21
MEAN	.00	.00	.00	.00	.00	.00	3.58	29.2	13.2	1.61	.22	.01
MAX	.00	.00	.00	.00	.00	.00	9.2	69	18	4.6	.98	.19
MIN	.00	.00	.00	.00	.00	.00	.00	10	5.4	.40	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	213	1800	788	99	13	.4

CAL YR 1983 TOTAL 1170.65 MEAN 3.21 MAX 48 MIN .00 AC-FT 2320
WTR YR 1984 TOTAL 1467.42 MEAN 4.01 MAX 69 MIN .00 AC-FT 2910

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1975 to September 1983.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler March 1975 to September 1983.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,540 micromhos May 3,4, 1984; minimum, 100 micromhos Mar. 7, 1983.
WATER TEMPERATURES: Maximum, 32.0°C June 20, 1978, June 29, 1979; minimum, 0.0°C Mar. 21-23, 1978, Apr. 20, May 7, 1979, Feb. 17, 18, Apr. 19, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 33,100 mg/L Sept. 7, 1981; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 6,750 tons Sept. 7, 1981; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY										
22...	1105	27	1200	8.5	9.0	9.0	5.6	570	120	66

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAY										
22...	75	1	1.3	297	340	17	.20	23	853	820

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
MAY									
22...	1.1	60	<.010	4.6	.100	.90	1.0	.030	.020

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
MAY									
22...	15	5	80	<3	<.1	30	13	1400	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAY					MAY				
15...	1240	55	29500	43800	22...	1105	27	2320	169

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	1390	1250			
2							---	1420	1260			
3							---	1520	1260			
4							---	1520	1260			
5							---	1500	1240			
6							---	1490	---			
7							---	---	---			
8							---	---	---			
9							---	---	---			
10							---	---	---			
11							---	---	---			
12							---	---	---			
13							---	---	---			
14							---	---	---			
15							1090	1190	---			
16							1270	1160	---			
17							---	1170	---			
18							---	1180	---			
19							1310	1200	1210			
20							---	1210	1210			
21							---	1200	1210			
22							---	1210	1210			
23							---	1210	1190			
24							---	1200	---			
25							---	---	---			
26							1350	---	---			
27							1360	---	---			
28							1360	---	---			
29							1370	---	---			
30							1370	1250	---			
31							---	1250	---			

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.0	5.0	12.0	7.5	21.0	9.0				
2	---	---	11.5	4.0	15.0	6.5	21.5	8.5				
3	---	---	9.5	3.5	14.5	7.5	19.0	8.0				
4	---	---	9.0	4.5	13.5	5.5	---	---				
5	---	---	11.0	5.0	---	---	---	---				
6	---	---	8.5	5.0	---	---	---	---				
7	---	---	10.0	4.5	---	---	---	---				
8	---	---	12.0	4.5	---	---	---	---				
9	---	---	13.0	5.0	---	---	---	---				
10	---	---	12.5	5.5	---	---	---	---				
11	---	---	12.0	6.5	---	---	---	---				
12	---	---	11.0	6.5	---	---	---	---				
13	---	---	10.5	6.5	---	---	---	---				
14	---	---	11.0	6.0	---	---	---	---				
15	4.5	1.0	11.0	5.0	---	---	---	---				
16	6.0	1.0	---	---	---	---	---	---				
17	---	---	11.5	5.5	---	---	---	---				
18	---	---	10.0	6.5	---	---	---	---				
19	---	---	12.0	6.0	17.0	9.0	---	---				
20	7.5	3.0	12.0	6.5	16.5	8.0	---	---				
21	9.0	2.5	11.0	7.0	17.5	7.5	---	---				
22	9.5	2.0	13.0	6.5	18.0	7.0	---	---				
23	13.0	2.5	13.5	6.5	18.5	7.0	---	---				
24	12.5	5.0	12.5	7.0	19.0	7.5	---	---				
25	6.0	2.5	12.5	6.5	15.0	9.5	---	---				
26	8.0	1.5	13.0	6.0	19.0	8.5	---	---				
27	9.5	2.5	13.0	6.5	19.0	8.0	---	---				
28	8.5	2.0	13.5	6.0	20.5	8.0	---	---				
29	9.5	3.0	14.5	6.5	20.0	8.5	---	---				
30	9.5	3.0	14.5	7.0	14.0	9.0	---	---				
31	---	---	12.0	7.5	---	---	---	---				

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Boxelder Creek, and 3.5 mi upstream from confluence with Stake S at of Rangely.

DRAINAGE AREA.--31.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Altitude of gage is 6,570 ft, from topographic map.

REMARKS.--Records good except those above 30 ft^3/s, which are poor. No diversion above station.

AVERAGE DISCHARGE.--10 years, 2.55 ft^3/s; 1,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft^3/s, Aug. 18, 1984, gage height, 6.12 ft, from rating curve extended above 70 ft^3/s, on basis of slope-area measurements at gage heights 3.89 ft, 4.08 ft, and 6.12 ft; minimum daily, 0.06 ft^3/s, Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,780 ft^3/s at 1345 Aug. 18, gage height, 6.12 ft; minimum daily, 1.3 ft^3/s, Feb. 22-27, Mar. 2-13, 18, Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.0	1.9	1.6	1.5	1.4	2.1	13	23	12	5.7	2.1
2	3.0	2.0	1.9	1.6	1.5	1.3	2.1	16	22	11	5.7	2.1
3	2.8	2.0	1.9	1.6	1.5	1.3	2.2	20	21	11	4.4	2.1
4	2.7	2.0	1.9	1.6	1.5	1.3	2.2	25	17	11	4.1	2.1
5	2.5	2.0	1.9	1.6	1.5	1.3	2.2	26	17	10	4.0	2.0
6	2.4	2.0	1.8	1.6	1.5	1.3	2.4	27	17	9.5	3.9	2.0
7	2.3	2.0	1.9	1.6	1.5	1.3	2.4	28	17	8.7	3.8	2.0
8	2.7	2.1	1.9	1.6	1.5	1.3	2.5	28	17	8.3	3.6	2.0
9	2.7	2.1	1.8	1.6	1.5	1.3	2.6	29	17	8.7	3.5	1.9
10	2.6	2.0	1.8	1.6	1.5	1.3	2.7	31	18	8.8	3.6	1.8
11	2.6	2.0	1.8	1.6	1.5	1.3	2.7	36	22	7.6	3.9	2.0
12	2.5	2.0	1.8	1.6	1.4	1.3	2.7	37	23	6.9	3.7	1.8
13	2.6	2.0	1.7	1.6	1.4	1.3	2.8	47	22	6.6	3.7	1.5
14	2.9	2.0	1.8	1.6	1.5	1.5	2.9	55	22	6.4	3.8	1.5
15	2.5	2.0	1.7	1.6	1.5	1.5	2.9	62	20	6.1	3.5	1.5
16	2.5	2.0	1.8	1.7	1.4	1.5	3.0	79	22	6.0	3.7	1.5
17	2.4	2.0	1.7	1.6	1.4	1.5	3.1	95	21	6.1	3.1	1.6
18	2.4	2.0	1.7	1.5	1.4	1.3	8.7	78	20	6.1	74	1.4
19	2.3	2.0	1.7	1.5	1.4	1.5	12	61	18	6.0	3.0	1.3
20	2.3	2.0	1.7	1.5	1.4	1.4	11	56	15	5.9	3.5	1.4
21	2.3	2.0	1.7	1.5	1.4	1.6	11	60	18	6.0	3.0	3.0
22	2.2	2.0	1.7	1.5	1.3	1.6	11	62	16	6.1	2.5	1.8
23	2.2	2.0	1.7	1.5	1.3	1.6	10	59	14	6.1	2.4	1.7
24	2.2	2.0	1.6	1.5	1.3	1.6	9.6	46	14	6.9	2.3	1.7
25	2.2	2.0	1.7	1.5	1.3	1.7	11	42	14	6.7	2.1	1.8
26	2.2	1.9	1.6	1.5	1.3	1.7	11	34	14	58	2.0	1.7
27	2.2	1.9	1.6	1.5	1.3	1.7	11	32	14	5.5	2.0	1.5
28	2.2	1.9	1.6	1.5	1.4	1.7	11	31	13	5.1	1.9	1.5
29	2.1	1.9	1.6	1.5	1.4	1.8	11	28	12	5.1	1.9	1.5
30	2.1	1.9	1.6	1.5	---	1.9	11	26	12	5.1	2.0	1.4
31	2.1	---	1.6	1.5	---	1.9	---	25	---	5.1	2.0	---
TOTAL	75.5	59.7	54.1	48.3	41.3	46.0	182.8	1294	532	278.4	172.3	53.2
MEAN	2.44	1.99	1.75	1.56	1.42	1.48	6.09	41.7	17.7	8.98	5.56	1.77
MAX	3.0	2.1	1.9	1.7	1.5	1.9	12	95	23	58	74	3.0
MIN	2.1	1.9	1.6	1.5	1.3	1.3	2.1	13	12	5.1	1.9	1.3
AC-FT	150	118	107	96	82	91	363	2570	1060	552	342	106

CAL YR 1983 TOTAL 2677.00 MEAN 7.33 MAX 207 MIN .55 AC-FT 5310
WTR YR 1984 TOTAL 2837.6 MEAN 7.75 MAX 95 MIN 1.3 AC-FT 5630

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 17, 1976; minimum, 271 micromhos Feb. 18, 1980.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 35,800 mg/L Aug. 2, 1982; minimum daily, 2 mg/L May 24, 1981.
SEDIMENT LOADS: Maximum daily, 43,600 tons August 18, 1984; minimum daily, 0.00 ton on many days during 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 23.5°C June 29, July 5, 7; minimum, 2.0°C Apr. 20, 27, 28.
SEDIMENT CONCENTRATIONS: Maximum daily, 29,200 mg/L Aug. 18; minimum daily, 30 mg/L Sept. 6.
SEDIMENT LOADS: Maximum daily, 43,600 tons August 18; minimum daily, 0.16 ton on Sept. 6.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 06...	1015	1.9	1520	8.1	7.5	8.8	1.0	560	89	81
APR 13...	1140	2.9	1590	8.1	13.5	7.8	1.4	570	90	82
MAY 22...	1440	61	1390	8.3	17.5	7.2	6.6	620	120	77
SEP 11...	1100	2.0	1760	8.0	11.0	7.5	--	620	100	88

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
DEC 06...	180	3	1.4	496	440	11	.60	22	--	1130
APR 13...	180	3	1.5	496	470	13	.60	22	916	--
MAY 22...	110	2	3.6	319	430	20	.20	23	--	1050
SEP 11...	180	3	1.8	386	540	20	.40	21	--	1070

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 06...	1100	1.5	5.8	.020	.33	.040	.66	.70	.010	.030
APR 13...	1200	1.2	7.2	<.010	.86	.080	.42	.50	.050	.040
MAY 22...	980	1.3	162	<.010	5.5	.110	.99	1.1	.020	.020
SEP 11...	1200	1.6	6.4	<.010	2.9	.050	--	<.20	.010	.020

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
DEC 06...	5.0	7	160	21	<.1	30	1	2800	<6
APR 13...	6.2	4	150	10	<.1	30	<1	2900	7
MAY 22...	14	9	90	5	<.1	40	13	2100	8
SEP 11...	10	5	180	9	<.1	38	7	2900	7

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BROMIDE DIS-SOLVED (MG/L AS BR)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
MAY 22...	<10	.11	75	<1	<1	<10	<1
SEP 11...	20	.04	85	<1	1	<10	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 22...	9	<1	30	9	<1	39
SEP 11...	3	<1	53	37	1	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 05...	1230	2.9	36	.28
NOV 22...	1425	2.0	55	.30
DEC 06...	1015	1.9	78	.40
08...	1545	1.9	170	.87
JAN 05...	1305	1.8	143	.70
12...	1240	1.6	180	.78
31...	1330	1.6	178	.77
MAR 20...	1245	1.6	77	.33
APR 13...	1140	2.9	117	.92
19...	1645	10	14300	386
MAY 15...	1500	67	25500	4630
22...	1310	65	17400	3040
22...	1440	61	17400	2880
23...	1525	57	13700	2100
25...	1350	52	10000	1410
JUN 12...	1215	21	4130	238
JUL 03...	0940	11	1380	42
AUG 13...	1120	3.6	149	1.4
SEP 11...	1100	2.0	229	1.2

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	1620	1600	---	1550	1530	1610	1390	1440	---	---	1790
2	1550	1620	1600	---	1560	1520	1620	1440	---	---	---	1830
3	1560	1620	1600	---	1570	1520	1620	1550	---	1520	---	1800
4	1570	1620	1590	---	1560	1530	1620	1550	---	1530	---	1800
5	1580	1600	1600	1550	1560	1520	1610	---	1410	---	---	1800
6	1580	1590	1570	1550	1560	1520	1550	1510	1410	---	---	1820
7	1590	1600	1550	1560	1550	1510	1560	1540	---	---	---	1810
8	1590	1570	1560	1560	1540	1510	1560	1490	---	---	---	1760
9	1590	1580	1560	1560	1540	1500	1560	1510	---	---	---	1750
10	1590	1580	1560	1560	1550	1500	1550	---	---	1500	---	1750
11	1590	1580	1560	1560	1550	1510	1530	---	---	---	---	1770
12	1590	1570	1550	1560	1550	1500	1560	---	1410	1490	---	---
13	1600	1560	1550	1550	1520	1490	1560	---	1390	---	1710	---
14	1560	1560	1540	1550	1510	1500	1560	---	1390	---	1610	1640
15	1570	1560	1530	1560	1530	1500	1560	1360	1400	---	1610	1780
16	1580	1560	1520	1540	1530	1490	1560	1410	1410	---	1600	1760
17	1600	1560	---	1550	1510	1510	1530	1450	1410	---	1620	1770
18	1620	1550	---	1590	1490	1520	1330	1480	1420	---	1710	1740
19	1620	1580	---	1590	1460	1520	1330	1530	1420	---	---	1680
20	1620	1580	---	1580	1430	1510	1340	1480	1570	---	1600	1700
21	1620	1590	---	1560	1430	1470	1380	1480	1550	---	1740	1700
22	1620	1600	---	1540	1460	1530	1340	1480	1540	---	1860	---
23	1620	1600	---	1520	1460	1540	1400	1440	1540	---	1760	---
24	1620	1600	---	1520	1480	1530	1410	1440	1530	---	---	---
25	1620	1590	---	1530	1510	1560	1400	1440	1510	---	1810	---
26	1620	1590	---	1530	1520	1570	1450	1420	1520	1500	---	1720
27	1620	1590	---	1540	1520	1590	1370	1440	1520	---	---	1690
28	1620	1580	---	1540	1530	1600	1380	---	1520	---	---	1710
29	1620	1590	---	1540	1530	1610	1390	---	1510	---	---	1700
30	1620	1600	---	1540	---	1610	1380	1420	1500	---	1870	1700
31	1630	---	---	1550	---	1610	---	1430	---	---	1860	---

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	9.0	12.5	8.0	9.0	6.5	7.5	5.5	10.0	6.5	12.0	6.5
2	11.5	8.0	12.5	8.0	10.0	7.0	7.0	5.0	10.0	6.5	12.0	6.5
3	12.0	7.5	12.5	7.5	9.0	6.0	7.5	5.0	10.0	6.5	12.0	6.5
4	14.5	7.0	12.5	7.5	8.5	5.5	8.5	5.5	10.5	6.5	10.0	6.0
5	14.5	7.5	11.5	7.5	8.0	5.0	9.5	5.5	10.5	6.5	10.0	6.0
6	15.0	7.5	12.0	7.5	8.0	5.5	9.5	6.5	10.5	6.5	11.5	6.5
7	14.0	8.0	13.0	7.5	9.0	5.5	9.5	7.0	10.0	7.0	12.0	6.5
8	15.0	8.0	9.0	5.5	9.5	6.5	9.5	6.5	10.5	7.0	13.0	6.5
9	14.5	9.0	10.0	6.0	9.5	6.0	9.5	6.5	11.0	6.5	12.5	7.0
10	13.5	8.5	11.0	7.0	9.5	6.5	9.0	6.5	10.5	6.5	13.0	7.0
11	13.5	7.5	10.5	7.0	9.5	6.0	9.0	6.5	9.5	6.0	13.0	7.5
12	13.5	7.5	11.0	7.5	9.0	6.0	9.0	7.0	10.5	6.0	11.0	7.0
13	13.0	7.5	10.5	6.0	8.0	6.0	9.0	6.5	11.5	7.0	13.5	7.5
14	12.0	7.5	10.5	6.5	8.0	6.0	9.0	6.5	9.0	6.5	11.0	7.0
15	12.5	7.0	10.5	6.5	9.0	5.5	8.5	6.5	10.5	6.5	13.5	8.0
16	13.5	7.0	10.0	6.5	8.0	5.5	8.5	6.0	11.0	6.5	12.5	6.5
17	13.0	7.5	10.5	7.0	8.5	6.5	8.0	6.0	8.5	6.5	12.0	7.5
18	12.5	8.0	9.5	7.0	8.5	6.5	8.0	6.0	10.0	6.5	10.0	7.5
19	12.5	7.0	10.0	6.5	9.0	6.0	8.5	6.0	9.5	6.0	13.5	7.0
20	13.0	7.0	8.5	7.0	7.0	4.5	8.5	6.0	9.5	6.0	14.5	7.5
21	13.0	7.0	9.0	6.0	7.0	5.0	9.0	6.0	10.0	6.0	15.0	7.0
22	13.0	7.5	8.5	5.5	7.5	5.5	9.0	6.5	10.0	6.5	11.5	7.0
23	13.0	7.5	8.0	5.5	6.5	5.5	9.5	6.5	9.5	6.0	13.5	8.0
24	10.0	7.5	8.5	6.0	7.0	5.0	9.5	6.5	9.5	6.0	15.0	7.5
25	12.5	7.0	9.0	5.5	7.5	5.5	10.5	7.0	9.5	6.0	13.0	7.0
26	13.0	7.0	7.0	5.5	8.5	6.0	10.0	6.5	9.5	6.0	11.5	7.0
27	12.5	7.5	8.5	6.0	8.5	6.0	10.0	6.5	10.0	6.0	13.0	7.5
28	12.5	7.5	9.0	6.0	7.0	5.0	10.0	6.5	11.0	6.0	13.0	7.5
29	12.5	7.5	8.0	5.5	7.0	5.0	10.0	6.5	11.5	6.5	12.0	8.5
30	12.5	7.5	9.0	6.0	8.5	6.0	9.5	6.5	---	---	10.5	8.0
31	12.5	8.0	---	---	8.5	6.0	10.0	6.5	---	---	13.5	8.5
MONTH	15.0	7.0	13.0	5.5	10.0	4.5	10.5	5.0	11.5	6.0	15.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	8.0	13.5	5.5	---	---	---	---	---	---	17.5	10.0
2	11.5	8.0	16.5	5.0	---	---	---	---	---	---	18.5	8.5
3	14.5	8.0	16.5	3.5	---	---	22.5	11.5	---	---	17.5	9.0
4	15.0	7.5	13.5	4.0	---	---	23.0	8.0	---	---	18.0	9.0
5	15.0	8.0	17.0	5.0	13.5	7.5	23.5	8.0	---	---	18.0	9.5
6	15.0	8.5	13.0	4.5	13.5	5.0	23.0	8.0	---	---	17.0	10.0
7	15.0	8.5	15.5	3.5	---	---	23.5	10.0	---	---	15.5	9.5
8	15.5	8.0	17.5	3.5	---	---	21.5	11.0	---	---	16.5	8.5
9	12.5	7.0	18.0	5.0	---	---	22.0	11.0	---	---	17.0	9.5
10	15.0	7.0	19.0	5.0	---	---	23.0	10.0	---	---	17.0	9.5
11	13.0	7.5	21.5	5.0	---	---	21.5	9.0	---	---	16.0	10.0
12	14.5	7.5	18.0	6.5	20.0	9.0	21.5	9.0	---	---	17.5	9.5
13	15.0	7.5	20.0	6.5	19.5	6.5	18.5	11.5	21.5	12.5	18.5	10.5
14	16.0	7.5	17.5	9.0	20.5	7.0	19.5	11.5	21.5	11.5	18.0	9.5
15	16.0	7.5	15.5	6.5	18.5	8.0	19.5	11.5	18.5	10.5	18.0	9.0
16	17.0	7.5	17.5	5.0	18.0	8.0	19.0	10.0	19.0	11.5	18.0	10.0
17	17.0	7.5	18.0	3.0	20.5	7.0	19.0	10.0	22.5	11.0	---	---
18	17.5	7.0	16.5	6.0	17.5	6.5	18.5	10.5	20.5	7.5	---	---
19	15.0	6.0	19.0	5.0	22.0	7.0	19.0	11.0	18.0	10.5	18.0	9.5
20	10.0	2.0	18.0	5.5	20.5	8.5	18.0	11.5	14.0	10.5	18.5	9.0
21	10.5	3.0	18.0	6.5	20.0	7.0	18.5	12.0	19.5	9.5	18.0	9.5
22	14.0	2.5	20.0	6.5	21.5	6.5	17.0	12.0	19.0	11.0	---	---
23	16.5	3.5	20.5	5.5	22.0	6.5	17.0	12.5	14.0	12.5	---	---
24	14.5	5.5	19.0	6.5	22.0	7.0	16.5	12.0	18.0	12.0	---	---
25	7.5	3.0	18.5	5.5	18.0	10.0	20.0	10.5	19.0	10.0	---	---
26	11.5	2.5	18.0	5.0	22.5	8.5	20.0	11.0	21.5	9.0	16.5	9.0
27	15.5	2.0	16.5	5.0	22.5	8.0	---	---	20.5	9.5	16.0	8.0
28	11.0	2.0	14.0	5.0	23.0	8.5	---	---	18.5	11.0	15.0	7.0
29	13.5	2.5	15.5	7.0	23.5	8.5	---	---	18.5	11.5	15.0	6.5
30	13.5	5.0	21.0	5.5	15.5	10.0	---	---	20.0	10.5	15.0	7.0
31	---	---	---	---	---	---	---	---	19.0	10.0	---	---
MONTH	17.5	2.0	21.5	3.0	23.5	5.0	23.5	8.0	22.5	7.5	18.5	6.5
YEAR	23.5	2.0										

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2.8	34	.26	2.0	---	.90	1.9	---	.35
2	3.0	49	.40	2.0	---	.90	1.9	---	.35
3	2.8	77	.58	2.0	175	.95	1.9	---	.35
4	2.7	56	.41	2.0	98	.53	1.9	---	.35
5	2.5	38	.26	2.0	42	.23	1.9	---	.40
6	2.4	112	.73	2.0	42	.23	1.8	78	.38
7	2.3	---	.75	2.0	56	.30	1.9	---	.60
8	2.7	147	1.1	2.1	63	.36	1.9	170	.87
9	2.7	98	.71	2.1	---	.35	1.8	---	.80
10	2.6	---	.65	2.0	---	.35	1.8	---	.80
11	2.6	88	.62	2.0	---	.35	1.8	---	.80
12	2.5	56	.38	2.0	---	.35	1.8	---	.80
13	2.6	---	.75	2.0	---	.35	1.7	---	.75
14	2.9	329	2.6	2.0	---	.35	1.8	---	.80
15	2.5	192	1.3	2.0	---	.35	1.7	---	.75
16	2.5	161	1.1	2.0	---	.35	1.8	---	.80
17	2.4	196	1.3	2.0	---	.30	1.7	---	.75
18	2.4	175	1.1	2.0	---	.30	1.7	---	.70
19	2.3	122	.76	2.0	---	.30	1.7	---	.70
20	2.3	108	.67	2.0	---	.30	1.7	---	.70
21	2.3	---	.70	2.0	---	.30	1.7	---	.70
22	2.2	---	.70	2.0	55	.30	1.7	---	.70
23	2.2	---	.70	2.0	---	.30	1.7	---	.70
24	2.2	---	.80	2.0	---	.30	1.6	---	.65
25	2.2	---	.80	2.0	---	.35	1.7	---	.70
26	2.2	---	.80	1.9	---	.30	1.6	---	.65
27	2.2	---	.90	1.9	---	.30	1.6	---	.65
28	2.2	---	.90	1.9	---	.30	1.6	---	.65
29	2.1	---	.90	1.9	---	.35	1.6	---	.65
30	2.1	---	.90	1.9	---	.35	1.6	---	.65
31	2.1	---	.90	---	---	---	1.6	---	.65
TOTAL	75.5	---	25.43	59.7	---	11.55	54.1	---	20.15
		JANUARY			FEBRUARY			MARCH	
1	1.6	---	.65	1.5	110	.45	1.4	75	.28
2	1.6	---	.60	1.5	100	.41	1.3	75	.26
3	1.6	---	.60	1.5	---	.35	1.3	85	.30
4	1.6	---	.60	1.5	75	.30	1.3	---	.30
5	1.6	143	.62	1.5	105	.43	1.3	---	.30
6	1.6	---	.65	1.5	125	.51	1.3	---	.30
7	1.6	---	.65	1.5	---	.40	1.3	---	.30
8	1.6	---	.65	1.5	---	.30	1.3	---	.30
9	1.6	---	.65	1.5	70	.28	1.3	---	.30
10	1.6	---	.70	1.5	85	.34	1.3	---	.30
11	1.6	---	.75	1.5	80	.32	1.3	---	.30
12	1.6	180	.78	1.4	95	.36	1.3	---	.30
13	1.6	---	.75	1.4	80	.30	1.3	---	.30
14	1.6	---	.75	1.5	65	.26	1.5	---	.30
15	1.6	---	.75	1.5	85	.34	1.5	---	.30
16	1.7	---	.80	1.4	85	.32	1.5	---	.30
17	1.6	---	.75	1.4	---	.40	1.5	---	.30
18	1.5	---	.70	1.4	140	.53	1.3	---	.30
19	1.5	---	.70	1.4	125	.47	1.5	---	.30
20	1.5	---	.70	1.4	85	.32	1.4	80	.30
21	1.5	---	.60	1.4	95	.36	1.6	120	.52
22	1.5	---	.60	1.3	---	.30	1.6	100	.43
23	1.5	---	.60	1.3	85	.30	1.6	85	.37
24	1.5	---	.40	1.3	80	.28	1.6	---	.35
25	1.5	---	.40	1.3	70	.25	1.7	80	.37
26	1.5	---	.40	1.3	80	.28	1.7	70	.32
27	1.5	---	.40	1.3	75	.26	1.7	85	.39
28	1.5	---	.40	1.4	60	.23	1.7	85	.39
29	1.5	---	.40	1.4	70	.26	1.8	---	.40
30	1.5	---	.40	---	---	---	1.9	85	.44
31	1.5	80	.32	---	---	---	1.9	95	.49
TOTAL	48.3	---	18.72	41.3	---	9.91	46.0	---	10.41

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2.1	75	.43	13	8600	302	23	---	400
2	2.1	75	.43	16	13800	596	22	---	350
3	2.2	---	.45	20	14500	783	21	---	350
4	2.2	50	.30	25	17000	1150	17	---	350
5	2.2	170	1.0	26	13200	927	17	---	300
6	2.4	280	1.8	27	9500	693	17	---	300
7	2.4	80	.52	28	8200	620	17	---	300
8	2.5	---	.60	28	8250	624	17	---	250
9	2.6	100	.70	29	8800	689	17	---	250
10	2.7	115	.84	31	9800	820	18	---	250
11	2.7	175	1.3	36	---	1460	22	---	200
12	2.7	185	1.3	37	---	1850	23	2380	148
13	2.8	170	1.3	47	---	2540	22	5460	324
14	2.9	195	1.5	55	---	3340	22	4200	249
15	2.9	190	1.5	62	25100	4200	20	3430	185
16	3.0	210	1.7	79	---	5860	22	2940	175
17	3.1	280	2.3	95	---	10300	21	3220	183
18	8.7	9150	222	78	---	5480	20	---	150
19	12	13600	399	61	---	3290	18	2480	121
20	11	16400	485	56	---	2720	15	1840	75
21	11	---	400	60	---	2430	18	1900	92
22	11	---	300	62	13500	2260	16	2700	117
23	10	---	200	59	13700	2180	14	3000	113
24	9.6	---	200	46	---	1600	14	1950	74
25	11	---	250	42	10000	1130	14	1850	70
26	11	6600	196	34	---	1000	14	1950	74
27	11	5400	160	32	---	950	14	1790	68
28	11	8200	244	31	---	850	13	1800	63
29	11	5400	160	28	---	750	12	---	60
30	11	6400	190	26	7100	498	12	---	60
31	---	---	---	25	---	500	---	---	---
TOTAL	182.8	---	3423.97	1294	---	62392	532	---	5701
		JULY			AUGUST			SEPTEMBER	
1	12	---	55	5.7	---	20	2.1	340	1.9
2	11	---	55	5.7	---	50	2.1	---	1.5
3	11	1820	54	4.4	---	2.5	2.1	160	.91
4	11	2600	77	4.1	---	2.0	2.1	210	1.2
5	10	2340	63	4.0	---	2.0	2.0	100	.54
6	9.5	1800	46	3.9	---	2.0	2.0	30	.16
7	8.7	1210	28	3.8	---	1.8	2.0	60	.32
8	8.3	1340	30	3.6	---	1.8	2.0	195	1.1
9	8.7	2230	57	3.5	---	1.4	1.9	90	.46
10	8.8	2340	59	3.6	---	1.4	1.8	40	.19
11	7.6	1200	25	3.9	---	1.5	2.0	29100	369
12	6.9	1000	19	3.7	---	1.4	1.8	16600	83
13	6.6	690	12	3.7	144	1.4	1.5	---	.20
14	6.4	700	12	3.8	115	1.2	1.5	50	.20
15	6.1	700	12	3.5	164	1.5	1.5	50	.20
16	6.0	600	9.7	3.7	---	17	1.5	180	.73
17	6.1	570	9.4	3.1	3230	27	1.6	340	1.5
18	6.1	450	7.4	74	29200	43600	1.4	550	2.1
19	6.0	275	4.5	3.0	---	1.5	1.3	280	.98
20	5.9	400	6.4	3.5	---	1.4	1.4	760	3.0
21	6.0	380	6.2	3.0	---	1.2	3.0	12400	266
22	6.1	500	8.2	2.5	---	1.0	1.8	---	1.5
23	6.1	350	5.8	2.4	---	1.5	1.7	---	1.0
24	6.9	707	16	2.3	---	1.0	1.7	---	.50
25	6.7	748	13	2.1	---	1.0	1.8	---	.50
26	58	---	17100	2.0	---	.80	1.7	---	.40
27	5.5	---	4.5	2.0	---	.80	1.5	---	.30
28	5.1	---	4.0	1.9	---	.50	1.5	---	.30
29	5.1	---	3.5	1.9	---	.50	1.5	---	.30
30	5.1	---	3.5	2.0	500	2.7	1.4	---	.20
31	5.1	---	3.0	2.0	250	1.4	---	---	---
TOTAL	278.4	---	17809.1	172.3	---	43751.20	53.2	---	740.19
YEAR	2837.6		133913.63						

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO

LOCATION.--Lat 40°10'47", long 108°33'53", in SW¼SE¼ sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 60 ft downstream from bridge on County Road 73, 0.5 mi below Boise Creek, and 16.4 mi east of rangely.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--2,530 mi^2.

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,395 ft, from topographic map.

REMARKS.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 31,500 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,440 ft^3/s, June 7, 1984, gage height, 8.45 ft; minimum daily, 320 ft^3/s, Jan. 1-7, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,440 ft^3/s at 2100 June 7, gage height, 8.45 ft; minimum daily, 390 ft^3/s, Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	618	568	510	475	425	620	904	5340	3640	1470	1020
2	694	618	590	505	475	435	610	1060	6060	3530	1430	931
3	790	618	585	505	470	440	555	1260	5190	3070	1370	886
4	838	612	585	505	470	445	560	1070	4980	2630	1320	861
5	790	607	559	505	470	455	615	1120	4730	2450	1410	851
6	772	606	519	505	460	465	690	1180	5020	2370	1350	852
7	742	603	509	500	460	480	730	1130	5670	2420	1320	834
8	712	647	537	500	460	490	735	1090	6100	2720	1250	811
9	706	692	546	510	460	510	880	1170	5350	2470	1210	790
10	700	638	545	470	460	515	775	1440	4710	2300	1170	784
11	718	634	542	500	455	525	863	1820	4050	2170	1140	822
12	700	634	536	510	455	530	810	2440	4040	1960	1040	863
13	670	634	540	495	455	555	736	3000	4060	1780	975	849
14	733	634	540	520	455	556	754	3510	3990	1790	918	794
15	738	626	555	510	455	570	760	3960	4250	1770	977	792
16	696	595	575	545	455	589	802	4810	4610	1680	962	922
17	671	611	536	485	455	574	898	5100	4980	1500	911	912
18	664	621	570	480	455	596	1150	4910	4990	1470	1020	828
19	696	621	550	475	455	569	1330	4200	4570	1410	1180	796
20	671	620	560	475	455	595	1220	4000	4330	1350	1360	783
21	657	619	495	475	450	620	1140	4510	4180	1310	1420	753
22	654	617	500	475	460	655	954	4740	4440	1280	1050	908
23	648	574	530	475	420	630	922	4920	4440	1280	1040	866
24	646	553	525	475	420	640	1080	5300	4270	1330	1080	805
25	643	594	545	475	430	658	1320	5980	4090	1540	990	871
26	636	618	550	475	415	620	1360	6170	4030	1530	940	900
27	631	577	540	475	390	625	1100	5730	3780	1580	907	876
28	627	563	510	475	415	615	1060	5440	3660	1420	877	851
29	621	572	515	475	425	652	989	4890	3640	1360	855	839
30	618	565	525	475	---	582	916	4760	3620	1320	830	826
31	614	---	510	475	---	576	---	4850	---	1440	850	---
TOTAL	21296	18341	16792	15235	13035	17192	26934	106464	137170	59870	34622	25476
MEAN	687	611	542	491	449	555	898	3434	4572	1931	1117	849
MAX	838	692	590	545	475	658	1360	6170	6100	3640	1470	1020
MIN	600	553	495	470	390	425	555	904	3620	1280	830	753
AC-FT	42240	36380	33310	30220	25850	34100	53420	211200	272100	118800	68670	50530

CAL YR 1983 TOTAL 398115 MEAN 1091 MAX 5600 MIN 320 AC-FT 789700
WTR YR 1984 TOTAL 492427 MEAN 1345 MAX 6170 MIN 390 AC-FT 976700

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC										
07...	0940	555	--	8.7	.0	11.2	290	71	27	51
JAN										
26...	1100	475	688	8.3	.0	11.8	280	70	26	45
APR										
11...	1035	863	--	8.3	6.0	10.0	330	73	36	82
MAY										
30...	1115	4350	390	8.5	12.0	8.8	160	40	15	18
JUN										
07...	1015	5450	524	8.4	7.5	9.3	200	48	20	40
JUL										
20...	1000	1340	602	8.4	21.0	7.3	250	58	25	37
27...	1100	1530	668	8.3	17.0	10.2	230	53	24	40
AUG										
22...	1430	1050	700	8.3	185	11.0	250	57	26	40
SEP										
04...	1445	846	695	8.5	22.0	9.0	260	55	29	46
25...	0945	844	700	8.6	8.0	13.0	290	64	31	50

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC										
07...	1	1.3	204	170	13	.30	15	470	.64	707
JAN										
26...	1	1.5	193	180	13	.30	15	470	.63	599
APR										
11...	2	2.3	210	280	19	.30	13	630	.86	1470
MAY										
30...	.6	1.4	122	74	5.0	.20	11	240	.32	2800
JUN										
07...	1	1.8	135	130	8.8	.20	11	340	.46	5030
JUL										
20...	1	1.6	172	140	9.0	.20	15	390	.53	1410
27...	1	2.2	159	150	9.5	.20	14	390	.53	1610
AUG										
22...	1	2.2	173	150	9.6	.20	15	400	.55	1150
SEP										
04...	1	1.8	189	170	11	.30	14	440	.60	1010
25...	1	2.5	196	180	14	.30	14	470	.64	1080

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC										
07...	--	--	.30	--	.050	--	.15	--	.20	--
JAN										
26...	--	--	.40	--	.080	--	.32	--	.40	--
APR										
11...	--	--	.50	--	.070	--	1.9	--	2.0	--
MAY										
30...	--	--	.60	--	.030	--	.37	--	.40	--
JUN										
07...	.48	.010	.50	.49	.050	.060	4.0	.84	4.0	.90
JUL										
20...	--	--	.30	--	.050	--	.85	--	.90	--
27...	--	--	.40	--	.040	--	.56	--	.60	--
AUG										
22...	--	--	.50	--	.100	--	1.3	--	1.4	--
SEP										
04...	--	--	.30	--	.020	--	--	--	--	--
25...	--	--	.40	--	.020	--	.18	--	.20	--

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	STRONTIUM, DISSOLVED (UG/L AS SR)
DEC										
07...	.50	.040	--	--	2.8	2.4	--	50	14	910
JAN										
26...	.80	.090	--	--	2.4	2.4	--	50	9	730
APR										
11...	2.5	1.60	--	--	12	4.5	--	70	--	880
MAY										
30...	1.0	.200	--	--	--	--	--	20	28	400
JUN										
07...	4.5	1.20	.060	.020	25	4.7	<.01	40	39	410
JUL										
20...	1.2	.220	--	--	--	--	--	50	8	680
27...	1.0	.970	--	--	--	--	--	50	9	620
AUG										
22...	1.9	.320	--	--	--	--	--	40	5	700
SEP										
04...	--	.080	--	--	--	--	--	50	<3	810
25...	.60	.050	--	--	--	--	--	60	--	870

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
JUN										
07...	49000	3	<1	200	37	<10	<1	<1	60	<10

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
JUN										
07...	20	94	7	43	<1	70	1200	8	.2	<.1

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN									
07...	2	2	89	2	3	2	<1	270	7

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
03...	1020	808	1310	2860
11...	1340	718	202	392
14...	1215	850	2500	5740
16...	1135	700	180	340
24...	1750	625	110	186
NOV				
01...	1630	595	140	225
07...	1725	580	130	204
15...	1525	615	133	221
21...	0810	625	104	176
28...	1615	585	68	107
DEC				
04...	1840	585	97	153
07...	0940	555	84	126
13...	1315	545	79	116
21...	1705	495	206	275
29...	1300	515	19	26
JAN				
07...	1330	500	19	26
14...	1640	520	59	83
20...	1545	475	216	277
26...	1100	475	165	212
28...	1240	475	15	19
FEB				
05...	1550	470	33	42
12...	1800	455	226	278
18...	1650	455	83	102
27...	1610	390	33	35
MAR				
04...	1820	445	56	67
11...	1800	525	25	35
19...	1755	569	1160	1780
26...	1725	620	753	1260
APR				
04...	1210	560	705	1070
11...	1035	863	1860	4330
12...	1630	810	961	2100
21...	1725	1200	555	1800
28...	1840	1120	1660	5000
MAY				
01...	1030	957	1100	2840
06...	1910	922	666	1660
13...	1940	3350	6910	62600
17...	1130	4760	2940	37800
21...	1840	3800	2920	30000
27...	1840	5370	2340	33900
JUN				
01...	1145	5210	1930	27100
06...	1530	5140	1620	22500
07...	0945	5360	3520	50900
07...	1015	5450	3260	48000
08...	1100	6090	2610	42900
14...	1345	3960	1420	15200
16...	1840	4610	1760	21900
24...	1730	4270	849	9790
29...	1230	3300	679	6050
JUL				
02...	0930	3530	840	8010
10...	1220	2300	1130	7020
13...	1120	1760	410	1950
18...	0920	1470	280	1110
20...	1000	1340	335	1210
25...	0840	1450	457	1790
27...	1100	1530	1920	7930
31...	0930	1400	209	790
AUG				
08...	1840	1250	226	763
15...	0940	977	577	1520
22...	1430	1050	1400	3970
23...	1550	1040	325	915
29...	1845	855	199	459
SEP				
05...	1735	826	148	330
12...	1710	863	1730	4030
25...	0945	844	161	367
27...	1740	928	115	288

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAY												
01...	1030	957	1100	2840	28	41	64	86	92	98	100	100
17...	1130	4760	2940	37800	24	32	53	78	91	99	100	100
JUN												
01...	1145	5210	1930	27100	22	23	46	76	89	98	100	100
06...	1530	5140	1620	22500	24	30	46	75	88	97	99	100
08...	1100	6090	2610	42900	29	38	57	82	92	99	100	100
14...	1345	3960	1420	15200	20	24	44	75	89	97	100	100
29...	1230	3300	679	6050	14	16	32	67	85	97	100	100
JUL												
13...	1120	1760	410	1950	7	18	40	77	90	98	100	100

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT

LOCATION.--Lat 40°00'50", long 109°04'48", in NW¼NE¼NE¼ sec.27, T.9 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 900 ft upstream from small right bank tributary, 2.7 mi downstream from Colorado-Utah State line, and 7.5 mi upstream from Evacuation Creek.

DRAINAGE AREA.--3,680 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,030 ft, from topographic map.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 31,900 acres above station.

AVERAGE DISCHARGE.--8 years, 784 ft^3/s; 568,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,620 ft^3/s, June 8, 1984, gage height, 8.88 ft; minimum, 10 ft^3/s, July 2, 3, 4, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,620 ft^3/s June 8, gage height, 8.88 ft; minimum daily, 270 ft^3/s, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565	592	587	370	410	380	865	1070	4720	3340	1400	795
2	707	594	565	370	430	420	932	1120	5210	3250	1410	859
3	866	594	542	370	450	450	767	1380	5460	3040	1350	880
4	830	593	537	330	470	470	714	1350	4810	2900	1220	814
5	764	575	520	310	470	470	785	1250	4790	2700	1200	795
6	729	568	460	300	470	460	908	1290	4860	2500	1170	727
7	707	564	430	320	490	410	942	1290	5340	2300	1270	768
8	670	601	430	330	520	420	905	1260	6150	2100	1170	693
9	665	661	556	310	520	460	950	1260	6050	2200	1150	729
10	670	639	600	290	520	500	1050	1420	4800	2200	1070	734
11	670	586	620	280	520	550	958	1790	4140	2050	1040	871
12	680	579	610	310	520	600	1090	2300	4110	1950	1020	1100
13	670	580	600	350	510	600	854	3060	4080	1900	1010	837
14	690	579	550	350	490	640	788	3640	4050	1850	967	801
15	806	583	520	330	480	700	739	4050	4250	1800	918	760
16	764	550	566	320	450	760	773	4810	4540	1700	900	774
17	696	546	541	290	460	850	870	5210	4880	1600	1120	794
18	669	563	537	280	440	920	1020	5270	4790	1530	1090	814
19	661	560	440	270	430	990	1340	5060	4460	1450	1380	790
20	671	562	410	290	420	1050	1480	4500	4240	1390	1520	763
21	648	560	390	340	330	1200	1430	4540	4210	1320	1520	782
22	637	575	360	380	340	1700	1140	4870	4290	1310	1260	973
23	629	532	340	420	350	1400	1000	4990	4260	1290	1090	824
24	624	561	370	460	376	1000	994	5160	4110	1340	1100	805
25	616	511	400	470	380	980	1190	5410	3960	1420	1050	800
26	612	550	420	470	370	920	1550	5840	3860	1520	1030	808
27	608	630	450	470	370	949	1490	5810	3520	1490	960	812
28	603	569	420	470	370	863	1320	5350	3390	1450	911	797
29	594	569	380	470	370	877	1190	4910	3360	1340	873	778
30	595	604	350	460	---	917	1140	4590	3280	1330	841	770
31	593	---	370	430	---	890	---	4570	---	1370	812	---
TOTAL	20909	17330	14871	11210	12726	23796	31174	108420	133970	58930	34822	24247
MEAN	674	578	480	362	439	768	1039	3497	4466	1901	1123	808
MAX	866	661	620	470	520	1700	1550	5840	6150	3340	1520	1100
MIN	565	511	340	270	330	380	714	1070	3280	1290	812	693
AC-FT	41470	34370	29500	22240	25240	47200	61830	215100	265700	116900	69070	48090

CAL YR 1983 TOTAL 418949 MEAN 1148 MAX 5560 MIN 230 AC-FT 831000
WTR YR 1984 TOTAL 492405 MEAN 1345 MAX 6150 MIN 270 AC-FT 976700

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year. Prior to 1979 water year, published in "Hydrologic and Climatologic Data" reports for Utah.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to current year.
WATER TEMPERATURES: October 1976 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

INSTRUMENTATION.--Specific conductance and temperature recorder since October 1976.

REMARKS.--Sediment loads computed on U.S.P.S. 69 pumping sediment sampler concentrations for days where concentrations are given.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded (more than 20-percent missing record), 1,570 micromhos July 22, 1977; minimum recorded, 120 micromhos April 29, 1981.
WATER TEMPERATURES: Maximum recorded (more than 20-percent missing record), 31.0°C Aug. 9, 1978; minimum, 0.0°C on many days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 61,000 mg/L Sept. 8, 1978; minimum daily mean, 40 mg/L Sept. 21, 1983.
SEDIMENT LOADS: Maximum daily, 412,000 tons Sept. 8, 1978; minimum daily, 1.0 ton July 2, 3, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,230 micromhos Sept. 6; minimum recorded, 229 micromhos June 16.
WATER TEMPERATURES: Maximum recorded, 24.5°C July 21; minimum, 0.0°C several days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 20,400 mg/L Sept. 12; minimum daily mean, 180 mg/L Sept. 10.
SEDIMENT LOADS: Maximum daily, 141,000 tons June 8; minimum daily, 292 tons Jan. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 31...	1430	615	700	8.3	9.0	9.8	270	62	28	51	1
DEC 12...	1300	612	770	8.3	.5	11.8	290	66	30	56	1
FEB 02...	1400	421	790	8.1	0.0	8.6	310	73	30	59	1.5
MAR 13...	1310	586	830	7.9	.5	9.8	260	59	28	69	2
APR 12...	1700	1180	1090	7.5	7.5	9.4	390	90	41	94	2
JUN 25...	1300	3900	455	8.2	17.0	7.9	150	29	18	28	1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)
OCT 31...	1.6	194	180	14	.30	12	470	.63	773	.15	<.010	60
DEC 12...	1.6	201	200	14	.30	13	500	.68	829	.21	<.010	60
FEB 02...	1.7	220	200	17	.30	15	529	.72	601	.41	.010	60
MAR 13...	2.2	197	200	21	.30	13	510	.69	808	.48	.040	60
APR 12...	2.9	244	330	26	.40	12	740	1.0	2370	.69	.030	110
JUN 25...	1.3	127	82	6.7	<.10	9.4	250	.34	2640	.16	<.010	30

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756	681	655		---	830	1060	1090	437	438	688	881
2	833	675	667		789	833	1060	1090	462	454	685	966
3	917	676	664		795	831	1060	1100	386	456	673	954
4	771	659	669		793	830	1070	1090	391	445	660	1010
5	778	654	678		785	835	1080	1070	372	464	652	1150
6	760	656	693		788	840	1080	1060	463	476	637	1120
7	724	666	712		783	843	1080	1050	601	480	632	828
8	707	681	730		781	845	1070	1030	617	508	632	708
9	714	729	747		783	845	1060	1000	625	530	652	672
10	711	695	757		777	849	1070	972	634	609	660	670
11	715	696	763		774	850	1070	909	610	590	647	661
12	722	706	769		778	851	1080	866	554	507	634	996
13	709	713	771		778	854	1090	900	489	532	633	921
14	698	726	775		773	855	1100	836	533	558	637	913
15	734	720	775		779	861	1120	759	508	575	639	772
16	747	718	773		778	870	1120	718	428	565	643	836
17	745	727	773		753	877	1120	679	429	575	669	824
18	730	744	775		776	888	1110	643	446	627	679	703
19	718	733	778		788	897	1070	616	464	717	797	699
20	704	731	779		795	909	1000	634	572	771	843	701
21	684	729	776		798	921	960	610	475	867	866	802
22	687	729	---		804	932	960	571	434	850	839	956
23	692	728	---		815	940	978	550	443	758	803	729
24	696	736	---		822	948	997	555	477	744	783	745
25	685	703	---		820	961	1000	528	475	775	779	803
26	683	643	---		822	964	1010	516	470	748	781	712
27	679	644	---		825	964	1000	512	498	718	793	694
28	674	634	---		823	984	1000	488	506	686	799	679
29	678	634	---		827	1000	1030	491	496	678	796	681
30	658	646	---		---	1020	1060	483	461	675	795	681
31	662	---	---		---	1050	---	447	---	675	797	---
MEAN	722	694	737		793	896	1050	770	492	615	717	816

WTR YR 1984 MEAN 755 MAX 1150 MIN 372

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	12.5	9.5	7.5	.0	.0			---	---	.5	.5
2	13.0	12.0	9.5	7.5	.0	.0			.0	.0	.5	.5
3	12.5	11.0	9.5	7.0	.5	.0			.0	.0	.5	.5
4	12.5	10.0	9.5	6.5	.5	.0			.0	.0	.5	.5
5	13.0	10.0	8.5	6.5	.0	.0			.0	.0	.5	.5
6	14.5	11.0	8.5	6.0	.0	.0			.0	.0	.5	.5
7	14.5	12.0	7.5	6.0	.5	.0			.0	.0	.5	.5
8	14.5	12.5	7.5	5.0	.5	.0			.0	.0	.5	.5
9	15.5	12.5	5.0	3.0	.5	.0			.0	.0	.5	.5
10	14.5	12.5	5.0	3.5	.5	.0			.0	.0	.5	.5
11	14.0	11.5	4.5	3.0	.5	.0			.0	.0	.5	.5
12	13.0	10.5	5.0	3.0	.5	.0			.0	.0	.5	.5
13	12.5	9.5	5.5	3.5	.5	.0			.0	.0	.5	.5
14	12.5	11.0	6.0	4.0	.0	.0			.0	.0	.5	.5
15	11.5	4.5	5.0	3.5	.5	.0			.0	.0	.5	.5
16	10.5	8.5	4.0	2.5	.5	.0			.0	.0	.5	.5
17	11.0	8.5	4.0	2.5	.5	.0			.0	.0	.0	.0
18	11.5	9.5	4.5	3.5	.5	.0			.0	.0	.0	.0
19	11.0	8.5	4.0	2.5	.5	.0			.0	.0	.0	.0
20	10.0	7.5	3.5	2.5	.5	.0			.0	.0	.0	.0
21	10.0	7.0	3.5	2.0	.5	.0			.0	.0	.0	.0
22	10.5	7.0	3.0	1.5	---	---			.0	.0	.0	.0
23	10.5	7.0	1.5	.0	---	---			.0	.0	.5	.0
24	10.5	4.0	.5	.0	---	---			.5	.0	.0	.0
25	9.0	6.5	.5	.0	---	---			.5	.0	.5	.0
26	8.5	6.0	.5	.0	---	---			.5	.5	1.0	.0
27	9.0	5.5	.0	.0	---	---			.5	.5	1.5	.0
28	9.0	6.0	.0	.0	---	---			.5	.5	2.5	.0
29	9.5	3.5	.0	.0	---	---			.5	.5	2.0	.0
30	9.5	7.0	.0	.0	---	---			---	---	5.0	.0
31	10.0	7.5	---	---	---	---			---	---	6.5	5.0
MONTH	15.5	3.5	9.5	.0	.5	.0			.5	.0	6.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	11.0	8.5	14.5	13.5	15.0	13.0	22.5	22.0	21.5	18.5
2	6.5	4.0	11.5	9.5	15.0	13.0	16.5	13.5	22.5	21.0	21.0	18.0
3	7.5	2.5	11.5	9.0	14.0	13.0	17.5	15.0	22.5	21.5	20.0	17.0
4	9.5	4.5	11.0	9.5	14.0	12.5	17.5	15.0	22.5	21.5	20.0	16.5
5	10.0	6.5	12.0	9.0	13.0	12.5	18.0	15.5	22.5	21.5	20.5	17.0
6	9.5	7.5	11.0	9.5	12.0	10.0	18.5	16.0	22.0	20.5	19.5	17.5
7	10.5	7.5	11.5	8.5	11.5	9.5	18.0	17.0	22.0	21.0	18.5	16.0
8	11.5	8.0	12.5	9.0	11.0	7.5	18.5	17.0	22.5	21.0	18.5	14.0
9	9.5	8.0	14.0	10.5	9.5	6.0	19.5	18.0	22.5	21.5	19.0	15.5
10	9.5	3.0	15.0	12.0	10.0	5.5	20.0	17.5	23.0	21.5	19.5	16.5
11	9.0	6.0	16.5	13.5	13.0	9.5	20.0	18.0	23.0	22.0	19.0	17.0
12	8.0	4.5	17.0	10.5	12.5	9.0	20.5	18.5	22.5	21.5	18.0	15.5
13	10.0	6.0	16.0	14.5	11.5	9.5	20.0	18.5	23.0	22.0	19.5	16.0
14	11.0	7.0	14.5	13.0	12.5	10.5	21.0	18.0	23.0	22.0	19.5	17.0
15	12.5	8.0	14.0	12.5	14.5	11.5	22.5	20.0	23.0	22.0	20.0	17.0
16	13.5	9.0	14.0	12.0	14.0	13.0	23.0	20.0	22.5	22.0	20.0	17.5
17	14.0	10.0	14.0	11.0	13.5	11.5	22.5	20.0	23.0	22.0	19.5	17.0
18	15.0	12.0	13.5	11.5	14.0	12.0	23.0	20.0	23.0	22.5	19.5	16.0
19	13.5	11.0	13.5	12.0	11.0	9.5	23.5	20.5	22.5	21.0	19.0	16.5
20	11.0	9.0	14.0	12.0	11.5	10.0	23.5	21.0	21.5	20.0	18.5	16.5
21	9.0	7.5	14.5	13.0	13.0	10.5	24.5	21.5	20.5	19.0	18.5	16.0
22	9.5	6.0	14.5	12.0	13.0	10.5	23.0	21.5	21.5	16.0	17.0	14.0
23	11.5	8.0	15.5	13.0	13.5	11.0	22.5	20.5	21.0	20.5	17.0	14.5
24	12.5	10.0	15.0	13.5	13.5	11.0	22.5	21.0	21.0	20.0	15.5	12.5
25	11.0	7.5	15.0	12.5	13.0	12.0	22.5	21.0	20.5	20.5	13.0	10.0
26	7.0	5.5	15.5	12.5	13.0	11.5	22.5	21.5	21.0	20.0	12.5	9.5
27	7.0	4.5	15.0	12.5	14.5	11.5	22.5	20.5	21.0	20.0	13.5	10.0
28	8.5	5.5	15.0	13.0	15.5	13.0	23.5	21.0	21.5	20.5	12.5	9.5
29	8.5	6.0	15.0	13.0	15.5	13.5	23.5	17.5	21.5	21.0	12.0	9.0
30	9.5	7.5	15.5	13.5	15.5	14.5	23.0	22.5	21.5	21.0	12.5	9.5
31	---	---	15.0	14.0	---	---	23.0	21.5	21.5	20.0	---	---
MONTH	15.0	2.5	17.0	8.5	15.5	5.5	24.5	13.0	23.0	16.0	21.5	9.0
YEAR	24.5	.0										
YEAR	24.5	---										

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1934

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	565	209	319	592	236	377	587	365	578
2	707	458	874	594	240	385	565	342	522
3	866	537	1260	594	212	340	542	335	490
4	830	479	1070	593	225	360	537	343	497
5	764	420	866	575	235	365	520	362	508
6	729	402	791	568	228	350	460	358	445
7	707	397	758	564	213	324	430	345	401
8	670	397	718	601	238	386	430	330	383
9	665	386	693	661	268	478	556	326	489
10	670	384	695	639	272	469	600	335	543
11	670	381	689	586	241	381	620	348	583
12	680	383	703	579	231	361	610	349	575
13	670	373	675	580	235	368	600	360	583
14	690	369	687	579	235	367	550	360	535
15	806	448	975	583	228	359	520	342	480
16	764	414	854	550	223	331	566	343	524
17	696	405	761	546	230	339	541	315	460
18	669	401	724	563	243	369	537	342	496
19	661	388	692	560	248	375	440	388	461
20	671	376	681	562	230	349	410	341	377
21	648	352	616	560	234	354	390	351	370
22	637	349	600	575	236	366	360	333	324
23	629	342	581	532	277	398	340	334	307
24	624	332	559	561	366	554	370	426	426
25	616	312	519	511	365	504	400	---	---
26	612	305	504	550	381	566	420	---	---
27	608	295	484	630	413	703	450	---	---
28	603	282	459	569	381	585	420	---	---
29	594	269	431	569	362	556	380	---	---
30	595	260	418	604	368	600	350	---	---
31	593	242	387	---	---	---	370	---	---
TOTAL	20909	---	21043	17330	---	12619	14871	---	11357
		JANUARY			FEBRUARY			MARCH	
1	370	---	---	410	485	537	380	1100	1130
2	370	---	---	430	482	560	420	1220	1380
3	370	---	---	450	488	593	450	1290	1570
4	330	---	---	470	503	638	470	1310	1660
5	310	---	---	470	490	622	470	1340	1700
6	300	368	298	470	524	665	460	1370	1700
7	320	371	321	490	495	655	410	1410	1560
8	330	---	---	520	499	701	420	1450	1640
9	310	377	316	520	478	671	460	1500	1860
10	290	390	305	520	508	713	500	1500	2030
11	280	399	302	520	486	682	550	1500	2230
12	310	394	330	520	498	699	600	1540	2490
13	350	388	367	510	480	661	600	1530	2480
14	350	385	364	490	483	639	640	1620	2800
15	330	408	364	480	513	665	700	2450	4630
16	320	407	352	450	496	603	760	2950	6050
17	290	400	313	460	473	587	850	3460	7940
18	280	420	318	440	478	568	920	3320	8250
19	270	400	292	430	519	603	990	3410	9110
20	290	410	321	420	501	568	1050	3440	9750
21	340	425	390	330	499	445	1200	3700	12000
22	380	435	446	340	512	470	1700	3970	18200
23	420	440	499	350	534	505	1400	4220	16000
24	460	450	559	376	566	575	1000	4050	10900
25	470	460	584	380	578	593	980	4010	10600
26	470	455	577	370	665	664	920	3750	9310
27	470	450	571	370	835	834	949	3260	8350
28	470	465	590	370	935	934	863	3020	7040
29	470	470	596	370	975	974	877	3020	7150
30	460	480	596	---	---	---	917	2940	7280
31	430	480	557	---	---	---	890	3030	7280
TOTAL	11210	---	10528	12726	---	18624	23796	---	186070

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	865	3120	7290	1070	2960	8550	4720	6040	77000
2	932	3180	8000	1120	2970	8980	5210	7150	101000
3	767	2980	6170	1380	3850	14300	5460	6760	99700
4	714	2930	5650	1350	3570	13000	4810	5350	69500
5	785	3080	6530	1250	3370	11400	4790	4930	63800
6	908	3180	7800	1290	3250	11300	4860	5210	68400
7	942	3180	8090	1290	3140	10900	5340	6580	94900
8	905	3130	7650	1260	3180	10800	6150	8510	141000
9	950	3240	8310	1260	3720	12700	6050	7400	121000
10	1050	3480	9870	1420	4670	17900	4800	5360	69500
11	958	3450	8920	1790	6400	30900	4140	4820	53900
12	1090	3730	11000	2300	7200	44700	4110	4540	50400
13	854	2420	5580	3060	7370	60900	4080	4490	49500
14	788	1950	4150	3640	7990	78500	4050	4250	46500
15	739	1820	3630	4050	8520	93200	4250	4420	50700
16	773	1970	4110	4810	8870	115000	4540	4020	49300
17	870	2370	5570	5210	9140	129000	4880	3860	50900
18	1020	2880	7930	5270	9210	131000	4790	3370	43600
19	1340	3580	13000	5060	7550	103000	4460	2820	34000
20	1480	4070	16300	4500	6100	74100	4240	2740	31400
21	1430	3930	15200	4540	5730	70200	4210	2500	28400
22	1140	3490	10700	4870	6030	79300	4290	2570	29800
23	1000	2920	7880	4990	6380	86000	4260	2340	26900
24	994	2790	7490	5160	6980	97200	4110	2300	25500
25	1190	3300	10600	5410	7280	106000	3960	2330	24900
26	1550	4080	17100	5840	7470	118000	3860	2420	25200
27	1490	4040	16300	5810	6980	109000	3520	2030	19300
28	1320	3580	12800	5350	5790	83600	3390	1960	17900
29	1190	3220	10300	4910	5440	72100	3360	2140	19400
30	1140	3050	9390	4590	5110	63300	3280	1940	17200
31	---	---	---	4570	5640	69600	---	---	---
TOTAL	31174	---	273310	108420	---	1934430	133970	---	1600500
		JULY			AUGUST			SEPTEMBER	
1	3340	1720	15500	1400	2310	8730	795	445	955
2	3250	1700	14900	1410	2340	8910	859	675	1570
3	3040	1560	12800	1350	3290	12000	880	670	1590
4	2900	1500	11700	1220	1160	3820	814	440	967
5	2700	1320	9620	1200	770	2490	795	375	805
6	2500	1220	8230	1170	790	2500	727	355	697
7	2300	1190	7390	1270	2090	7170	768	975	2020
8	2100	1240	7030	1170	1960	6190	693	710	1330
9	2200	1420	8430	1150	665	2060	729	330	650
10	2200	3280	19500	1070	520	1500	734	180	357
11	2050	2740	15200	1040	460	1290	871	7340	17300
12	1950	1460	7690	1020	420	1160	1100	20400	60600
13	1900	1130	5800	1010	365	995	837	4880	11000
14	1850	1020	5090	967	360	940	801	1620	3500
15	1800	1170	5690	918	330	818	760	680	1400
16	1700	1360	6240	900	6240	15200	774	2500	5220
17	1600	925	4000	1120	11100	33600	794	4070	8730
18	1530	980	4050	1090	6960	20500	814	1330	2920
19	1450	825	3230	1380	17400	64800	790	585	1250
20	1390	1070	4020	1520	20200	82900	763	430	886
21	1320	820	2920	1520	19400	79600	782	1020	2150
22	1310	1980	7000	1260	9600	32700	973	19900	52300
23	1290	2020	7040	1090	3840	11300	824	5460	12100
24	1340	6710	24300	1100	6120	18200	805	1220	2650
25	1420	8670	33200	1050	2520	7140	800	930	2010
26	1520	4200	17200	1030	580	1610	808	560	1220
27	1490	1330	5350	960	590	1530	812	510	1120
28	1450	1690	6620	911	585	1440	797	455	979
29	1340	1240	4490	873	580	1370	778	320	672
30	1330	2880	10300	841	595	1350	770	260	541
31	1370	5480	20300	812	530	1160	---	---	---
TOTAL	58930	---	314830	34822	---	434973	24247	---	199489
YEAR	492405		5017773						

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT		
31...	1430	615
DEC		
12...	1300	612
MAR		
13...	1310	586
APR		
12...	1700	1180
JUN		
25...	1300	3900

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 500 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 86.3 ft^3/s; 62,520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft^3/s, Sept. 14, 1970, gage height, 6.75 ft, from rating curve extended above 460 ft^3/s, on basis of slope-area measurement at gage height 6.13 ft; minimum daily determined, 3.4 ft^3/s, Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft^3/s at 2300 May 23, gage height, 5.98 ft, only peak above base of 500 ft^3/s; minimum daily, 11 ft^3/s, Feb 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	24	18	16	14	16	34	80	530	190	39	79
2	100	23	19	14	15	17	32	76	500	184	44	68
3	77	22	19	14	15	19	32	74	460	187	46	58
4	66	22	18	15	16	20	33	84	400	150	40	52
5	63	21	17	16	16	18	39	102	385	135	38	49
6	58	21	14	17	16	17	45	122	340	124	82	46
7	55	20	15	18	17	16	44	135	370	113	51	41
8	53	23	16	18	18	19	50	148	340	111	44	38
9	51	18	17	18	17	22	60	210	298	111	40	37
10	48	19	18	17	17	26	53	298	270	104	37	35
11	46	20	17	16	15	30	62	400	278	90	35	36
12	43	21	18	15	13	32	66	495	298	80	35	40
13	42	21	15	15	14	25	80	584	330	89	35	34
14	42	21	16	15	16	26	97	656	380	82	35	32
15	42	17	15	14	15	26	122	746	410	75	60	77
16	38	18	15	14	13	28	160	704	360	76	54	64
17	37	18	15	13	15	26	198	668	325	72	54	76
18	36	19	17	13	14	28	226	710	302	65	77	54
19	33	18	17	13	11	28	210	710	266	59	80	48
20	32	18	16	14	13	34	155	752	254	58	79	44
21	31	15	14	14	13	43	117	842	270	55	79	42
22	30	15	14	14	14	49	104	912	266	59	66	40
23	29	17	14	13	14	42	106	976	242	59	99	38
24	28	16	14	13	13	40	124	994	234	56	153	38
25	28	16	16	13	15	42	138	833	254	50	102	35
26	26	16	17	13	13	38	115	746	286	46	88	35
27	25	17	18	13	12	38	102	674	238	45	77	37
28	24	16	17	13	13	35	90	650	202	45	67	34
29	23	17	15	13	14	36	86	626	190	53	66	34
30	23	17	13	13	---	36	80	584	181	46	57	31
31	23	---	14	14	---	35	---	525	---	44	63	---
TOTAL	1383	566	498	451	421	907	2860	16116	9459	2713	1922	1372
MEAN	44.6	18.9	16.1	14.5	14.5	29.3	95.3	520	315	87.5	62.0	45.7
MAX	131	24	19	18	18	49	226	994	530	190	153	79
MIN	23	15	13	13	11	16	32	74	181	44	35	31
AC-FT	2740	1120	988	895	835	1800	5670	31970	18760	5380	3810	2720

CAL YR 1983 TOTAL 38898.0 MEAN 107 MAX 758 MIN 9.0 AC-FT 77150
WTR YR 1984 TOTAL 38668.0 MEAN 106 MAX 994 MIN 11 AC-FT 76700

NOTE.--NO GAGE-HEIGHT RECORD DEC. 5 TO MAR .12

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi^2.

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft, National Geodetic Vertical Datum of 1929. Jan 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream, at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site, at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft downstream, at different datum.

REMARKS.--Records good. Diversions for irrigation of large areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--53 years, 372 ft^3/s; 269,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s, Oct. 5, 1911, gage height, 17.8 ft, from floodmarks, from velocity-area study; minimum daily, 9.7 ft^3/s, Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft^3/s, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 14	2300	3,270	6.21	June 14	2300	1,800	4.67
May 24	2200	*4,360	6.88	June 26	0130	2,010	4.70

Minimum daily discharge, 64 ft^3/s, Dec. 6, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	106	83	82	76	94	165	396	2340	640	145	276
2	738	97	90	71	80	101	145	384	2080	590	151	272
3	525	95	90	71	82	120	140	360	1890	595	180	219
4	400	88	85	78	87	120	156	420	1690	515	145	208
5	372	90	85	83	87	99	219	500	1680	465	134	177
6	336	90	64	88	90	103	293	605	1520	400	251	160
7	296	85	68	94	99	95	312	640	1630	384	182	149
8	282	92	77	95	106	112	368	678	1530	340	154	143
9	268	83	80	90	95	138	444	903	1230	320	138	136
10	253	88	88	85	99	168	340	1290	1100	324	128	130
11	244	88	82	83	85	200	384	1720	1130	276	120	132
12	224	88	85	80	71	138	412	2140	1200	247	122	165
13	216	88	72	80	82	156	495	2440	1360	224	122	132
14	211	87	77	82	94	175	580	2650	1580	232	116	122
15	205	71	77	77	88	205	714	2840	1610	205	156	312
16	195	80	70	74	72	224	882	2650	1500	213	149	286
17	187	80	76	70	87	216	1090	2410	1290	224	136	320
18	177	83	85	70	82	224	1190	2340	1180	208	180	244
19	180	82	85	68	66	222	1130	2150	1110	172	190	216
20	177	80	80	76	71	253	847	2400	1060	163	192	205
21	165	68	70	74	72	282	645	2850	1050	185	190	187
22	147	68	66	76	78	324	555	3210	1000	187	163	182
23	136	80	70	70	82	253	545	3460	882	200	182	168
24	132	70	68	70	74	235	635	3810	810	185	433	170
25	126	74	83	70	87	250	720	3570	812	187	293	160
26	126	76	88	71	78	219	590	3120	1240	163	276	154
27	120	78	90	72	68	203	490	2940	910	132	244	170
28	116	71	85	71	72	175	444	2710	798	128	211	156
29	108	82	77	71	83	170	436	2590	690	158	205	156
30	108	80	64	72	---	172	408	2490	666	185	180	151
31	112	---	71	74	---	158	---	2240	---	170	172	---
TOTAL	7912	2488	2431	2388	2393	5604	15774	62906	38568	8617	5640	5658
MEAN	255	82.9	78.4	77.0	82.5	181	526	2029	1286	278	182	189
MAX	1030	106	90	95	106	324	1190	3810	2340	640	433	320
MIN	108	68	64	68	66	94	140	360	666	128	116	122
AC-FT	15690	4930	4820	4740	4750	11120	31290	124800	76500	17090	11190	11220

CAL YR 1983 TOTAL 181741 MEAN 498 MAX 3080 MIN 48 AC-FT 360500
WTR YR 1984 TOTAL 160379 MEAN 438 MAX 3810 MIN 64 AC-FT 318100

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--13 years, 39.5 ft³/s; 28,620 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s Sept. 30, 1982, gage height, 4.68 ft, maximum gage height, 4.69 ft, June 1, 1983; minimum daily discharge, 6.9 ft³/s, Dec. 29, 1976

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 973 ft³/s at 2000 May 23, gage height, 4.60 ft; minimum daily, 10 ft³/s, Nov. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	26	27	16	20	25	28	41	284	77	22	24
2	177	25	22	16	20	28	26	41	141	77	22	22
3	119	24	22	15	22	31	26	42	66	77	22	21
4	106	23	19	16	22	27	32	42	61	77	21	22
5	98	23	18	18	23	23	47	42	132	76	21	22
6	82	23	17	18	23	21	55	41	68	76	75	22
7	76	22	17	19	24	20	55	42	78	76	21	22
8	68	26	18	20	23	23	76	53	56	71	21	22
9	60	24	19	20	20	31	91	96	40	30	22	22
10	62	26	20	18	21	45	75	144	30	85	22	22
11	56	25	21	18	20	42	91	258	39	130	22	22
12	50	25	22	16	20	33	103	428	52	103	22	22
13	46	26	22	16	20	31	149	616	57	155	22	22
14	46	25	20	18	20	34	213	740	58	115	22	22
15	46	19	21	16	20	35	288	534	43	90	22	22
16	41	20	20	15	18	36	209	770	35	92	22	22
17	39	20	21	15	19	32	80	368	30	89	22	24
18	38	22	22	14	18	34	56	236	36	88	33	22
19	36	22	24	14	18	33	37	200	41	74	34	22
20	35	22	20	15	18	61	28	322	55	65	28	22
21	28	10	18	15	18	87	29	531	69	66	26	22
22	26	16	18	16	20	69	29	665	70	80	21	22
23	24	24	17	17	20	48	29	718	92	51	23	22
24	23	20	17	17	19	48	35	755	88	25	23	22
25	25	22	18	17	19	48	36	573	78	23	23	22
26	25	19	20	17	19	40	30	554	51	22	22	22
27	24	18	20	17	20	38	26	467	55	22	22	22
28	24	19	20	17	20	34	25	327	76	23	22	22
29	24	25	18	18	21	33	25	341	76	23	21	22
30	23	26	17	19	---	31	32	307	76	22	21	22
31	24	---	16	19	---	29	---	239	---	22	22	---
TOTAL	1860	667	611	522	585	1150	2061	10533	2133	2102	764	663
MEAN	60.0	22.2	19.7	16.8	20.2	37.1	68.7	340	71.1	67.8	24.6	22.1
MAX	309	26	27	20	24	87	288	770	284	155	75	24
MIN	23	10	16	14	18	20	25	41	30	22	21	21
AC-FT	3690	1320	1210	1040	1160	2280	4090	20890	4230	4170	1520	1320

CAL YR 1983 TOTAL 23705 MEAN 64.9 MAX 702 MIN 10 AC-FT 47020
WTR YR 1984 TOTAL 23651 MEAN 64.6 MAX 770 MIN 10 AC-FT 46910

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Aspen Creek. 4.0 mi downstream from East Fork, and 9 mi northeast of Chromo.

DRAINAGE AREA.--69.8 mi².

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft, National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft, higher.

REMARKS.--Records good. Diversions for irrigation of about 430 acres above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--48 years, 107 ft³/s; 77,520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s, June 9, 1980, gage height, 4.55 ft, from rating curve extended above 840 ft³/s, on basis of float-area measurement at gage height 4.44 ft; maximum gage height, 7.02 ft, May 13, 1941, present datum; minimum daily discharge, 8.4 ft³/s, Sept. 29, 1960 result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s, and maximum:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
aMay 24	unknown	unknown	unknown	Aug 6	0600	670	2.20

a-Maximum stage and discharge probably occurred this day.
Minimum daily discharge, 30 ft³/s, Nov. 21-23, Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	49	41	42	46	43	52	134	760	232	69	94
2	178	47	44	42	46	44	51	132	700	216	69	84
3	126	47	44	39	45	46	49	137	600	203	70	76
4	104	47	34	42	48	43	53	158	580	184	71	69
5	94	47	33	43	49	40	61	199	600	171	70	64
6	86	47	32	44	49	39	68	196	480	160	270	62
7	80	47	30	47	50	39	69	203	410	151	132	59
8	80	48	35	48	48	42	79	232	380	160	102	57
9	77	47	36	48	44	45	89	311	329	165	89	55
10	75	45	38	44	45	51	83	428	314	144	79	54
11	74	42	41	44	44	54	88	561	332	134	75	59
12	69	42	46	42	44	48	89	714	379	126	77	61
13	67	45	46	42	44	50	110	680	464	134	76	53
14	68	43	44	44	45	51	135	736	525	123	77	50
15	66	38	45	42	43	53	173	642	543	113	71	62
16	62	40	42	40	41	53	223	530	507	135	69	72
17	60	40	43	40	43	50	280	460	460	123	79	72
18	59	41	46	36	42	52	292	448	412	144	120	59
19	58	40	47	36	40	52	235	432	371	110	116	57
20	57	39	41	38	40	61	182	512	386	98	100	55
21	54	30	38	38	39	75	154	615	404	82	90	55
22	53	30	36	40	41	78	146	816	376	60	110	59
23	52	30	36	40	40	68	167	920	341	62	149	55
24	51	34	37	40	39	67	209	1080	320	72	162	51
25	50	34	38	40	41	70	205	1040	314	69	162	46
26	49	34	43	41	39	63	171	940	308	67	135	54
27	48	34	42	41	39	62	149	880	292	72	114	56
28	48	36	45	42	39	55	139	840	260	74	99	49
29	47	37	42	42	42	56	132	820	245	70	99	46
30	47	38	41	44	---	55	130	800	235	70	90	45
31	48	---	41	44	---	53	---	780	---	72	91	---
TOTAL	2327	1218	1247	1295	1255	1658	4063	17376	12627	3796	3182	1790
MEAN	75.1	40.6	40.2	41.8	43.3	53.5	135	561	421	122	103	59.7
MAX	240	49	47	48	50	78	292	1080	760	232	270	94
MIN	47	30	30	36	39	39	49	132	235	60	69	45
AC-FT	4620	2420	2470	2570	2490	3290	8060	34470	25050	7530	6310	3550

CAL YR 1983 TOTAL 56524 MEAN 155 MAX 976 MIN 30 AC-FT 112100
WTR YR 1984 TOTAL 51834 MEAN 142 MAX 1080 MIN 30 AC-FT 102800

NOTE.--NO GAGE-HEIGHT RECORD MAY 23 TO JUNE 8.

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.5 mi east of Chromo, and 6 mi upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi^2.

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--13 years, 58.1 ft^3/s; 42,090 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft^3/s, May 24, 1984, gage height, 4.92 ft; minimum daily, 10 ft^3/s, Oct. 10, 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft^3/s at 0500 May 24, gage height, 4.92 ft; minimum daily, 28 ft^3/s, Nov. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	49	44	42	46	48	72	93	366	152	59	97
2	178	49	49	42	48	51	54	94	230	153	59	87
3	138	49	49	40	46	54	42	94	134	152	59	77
4	112	48	42	42	49	53	42	94	77	151	59	72
5	99	48	36	44	50	46	42	94	133	151	59	65
6	90	47	35	44	51	48	42	94	66	150	60	57
7	84	46	35	46	53	48	42	94	61	150	59	59
8	84	50	38	48	51	49	42	94	60	103	59	57
9	81	45	40	48	44	52	42	94	60	69	59	55
10	76	47	43	44	46	59	42	158	61	65	58	54
11	76	45	44	44	45	65	41	311	65	65	58	56
12	72	45	46	42	45	59	44	232	70	65	58	63
13	69	47	46	42	45	60	43	191	62	65	58	54
14	70	46	44	44	46	64	45	278	60	65	58	52
15	67	40	44	42	45	71	44	369	59	65	58	64
16	64	41	42	40	44	74	50	239	59	65	59	77
17	62	41	44	40	45	69	54	214	59	63	61	75
18	61	44	46	38	44	74	52	248	59	78	61	62
19	60	42	48	38	45	72	48	251	59	84	60	59
20	58	42	42	38	45	90	48	296	82	69	59	56
21	57	28	40	38	44	123	47	311	105	61	59	55
22	55	30	38	40	48	131	47	412	120	49	59	56
23	54	34	37	40	48	98	48	493	151	51	60	52
24	53	35	37	40	48	104	48	677	152	74	92	50
25	49	37	40	40	47	109	49	557	137	72	161	45
26	51	39	44	42	46	91	48	460	106	63	141	54
27	49	38	44	42	44	84	48	413	118	67	118	59
28	49	38	44	42	46	76	48	381	153	70	102	50
29	47	41	42	44	46	76	49	357	152	70	98	46
30	42	41	42	44	---	74	67	378	152	67	94	44
31	45	---	42	44	---	71	---	326	---	67	93	---
TOTAL	2408	1272	1307	1304	1350	2243	1430	8397	3228	2691	2257	1809
MEAN	77.7	42.4	42.2	42.1	46.6	72.4	47.7	271	108	86.8	72.8	60.3
MAX	256	50	49	48	53	131	72	677	366	153	161	97
MIN	42	28	35	38	44	46	41	93	59	49	58	44
AC-FT	4780	2520	2590	2590	2680	4450	2840	16660	6400	5340	4480	3590

CAL YR 1983 TOTAL 25977 MEAN 71.2 MAX 353 MIN 28 AC-FT 51530
WTR YR 1984 TOTAL 29696 MEAN 81.1 MAX 677 MIN 28 AC-FT 58900

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft downstream from highway bridge, 0.2 mi southeast of Edith, 0.5 mi upstream from Colorado-New Mexico State line, and 1.3 mi upstream from Coyote Creek.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--Streamflow records, September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313. Water-quality data available, November 1970 to September 1974. Sediment data available April 1973 to September 1974.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft upstream, at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream, at datum 2.0 ft, higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at present datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres above station. High-water diversions above station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft³/s; 112,300 acre-ft/yr, prior to diversions through Azotea tunnel: 14 years (water years 1971-84), 71.8 ft³/s; 52,020 acre-ft/yr, subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s, Apr. 23, 1942, gage height, 6.55 ft, from rating curve extended above 1,100 ft³/s; minimum daily, 8.0 ft³/s, Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft³/s at 0830, May 24, gage height, 5.34 ft; minimum daily, 33 ft³/s, Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	55	52	48	46	55	118	170	315	154	65	104
2	226	57	52	44	48	65	104	160	226	157	65	96
3	160	57	52	44	50	70	79	154	153	154	65	88
4	125	57	46	46	55	70	90	160	92	151	70	81
5	113	55	39	50	55	60	125	184	126	151	70	73
6	102	57	34	50	55	65	151	167	109	148	116	65
7	98	54	40	55	60	60	148	160	82	145	90	66
8	94	58	46	60	60	65	160	157	81	113	77	65
9	92	55	48	55	60	85	174	157	79	68	72	63
10	86	55	50	50	60	100	130	184	79	70	72	63
11	84	54	50	50	50	90	139	409	77	65	72	63
12	82	52	50	48	44	81	139	341	70	60	73	72
13	79	55	44	48	50	92	145	367	72	65	70	62
14	79	54	46	48	55	111	133	360	63	66	68	57
15	79	49	46	48	55	151	136	445	65	66	72	70
16	73	47	44	44	44	184	148	345	70	68	73	88
17	72	47	46	44	50	184	164	282	72	75	75	82
18	70	55	50	42	50	188	174	310	73	90	81	70
19	66	50	50	42	42	184	142	294	79	96	75	65
20	65	52	48	44	42	226	136	343	96	77	79	63
21	63	41	42	46	44	290	118	353	116	68	73	62
22	62	36	40	46	46	270	113	434	120	62	77	65
23	60	39	42	42	48	184	106	472	148	57	82	63
24	60	36	42	42	46	202	116	687	148	79	98	62
25	58	44	48	42	50	212	118	537	139	82	170	52
26	57	44	55	44	48	160	102	445	116	73	154	60
27	55	41	55	44	42	145	92	398	116	77	125	70
28	55	33	50	42	46	130	94	370	151	81	108	62
29	54	54	46	42	50	128	118	335	145	84	98	58
30	52	47	40	44	---	128	130	358	145	82	104	55
31	54	---	44	46	---	116	---	294	---	82	98	---
TOTAL	2790	1490	1437	1440	1451	4151	3842	9832	3423	2866	2687	2065
MEAN	90.0	49.7	46.4	46.5	50.0	134	128	317	114	92.5	86.7	68.8
MAX	315	58	55	60	60	290	174	687	315	157	170	104
MIN	52	33	34	42	42	55	79	154	63	57	65	52
AC-FT	5530	2960	2850	2860	2880	8230	7620	19500	6790	5680	5330	4100

CAL YR 1983 TOTAL 34791 MEAN 95.3 MAX 507 MIN 28 AC-FT 69010
WTR YR 1984 TOTAL 37474 MEAN 102 MAX 687 MIN 33 AC-FT 74330

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft, from river-profile map.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres above station. Highwater diversions above station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft^3/s; 457,900 acre-ft/yr, prior to completion of Azotea tunnel: 14 years (water years 1971-84), 590 ft^3/s; 427,500 acre-ft/yr, since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft^3/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, about 5 ft^3/s, Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	0500	5,470	6.53	June 6	0330	2,600	4.92
May 25	0600	*6,200	7.02				

Minimum daily discharge, 140 ft^3/s, Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	224	180	200	190	220	582	721	2960	905	291	453
2	1800	224	180	190	200	240	480	669	2670	860	268	474
3	961	211	190	180	200	280	412	619	2310	852	300	388
4	740	201	190	180	200	290	427	669	2000	767	296	347
5	676	195	170	200	200	270	501	816	1830	702	283	312
6	613	195	140	200	200	260	682	969	2140	663	610	291
7	558	192	150	190	210	270	754	953	1820	619	501	268
8	529	192	160	200	210	290	767	937	1930	600	374	256
9	496	218	160	200	210	350	1210	1290	1560	529	312	235
10	480	188	170	200	210	550	747	1810	1410	463	279	221
11	453	198	170	200	210	480	795	2490	1320	501	268	214
12	427	195	160	210	210	582	760	2990	1410	453	291	264
13	407	195	170	210	200	663	913	3640	1490	443	291	245
14	402	201	170	210	220	781	1210	3850	1720	512	271	211
15	393	188	170	200	230	1220	1380	4470	1820	422	304	229
16	374	159	170	190	220	1510	1650	3910	1700	407	300	458
17	351	173	180	180	210	1180	1690	3320	1530	393	329	453
18	334	192	180	180	220	1120	1840	3120	1430	402	407	379
19	325	201	180	180	220	802	1870	2740	1350	398	405	320
20	304	198	180	180	200	969	1400	2870	1280	356	393	296
21	296	218	180	190	200	1330	953	3530	1360	325	374	275
22	283	159	180	200	210	1570	781	4210	1320	316	356	271
23	271	156	190	190	210	767	702	4770	1250	320	469	264
24	260	150	190	180	200	708	754	5370	1150	279	600	260
25	253	150	180	180	210	708	1010	5110	1130	300	529	249
26	245	160	180	180	200	637	781	4190	1370	283	553	245
27	231	160	190	180	200	625	657	3930	1150	260	469	271
28	228	160	200	180	200	582	619	3670	1080	275	402	268
29	228	170	180	180	200	682	637	3440	953	296	369	249
30	224	180	160	180	---	669	682	3340	929	360	351	238
31	221	---	160	180	---	564	---	3030	---	329	338	---
TOTAL	13516	5603	5410	5900	6000	21169	27646	87443	47372	14590	11583	8904
MEAN	436	187	175	190	207	683	922	2821	1579	471	374	297
MAX	1800	224	200	210	230	1570	1870	5370	2960	905	610	474
MIN	153	150	140	180	190	220	412	619	929	260	268	211
AC-FT	26810	11110	10730	11700	11900	41990	54840	173400	93960	28940	22970	17660

CAL YR 1983 TOTAL 271047 MEAN 743 MAX 4670 MIN 140 AC-FT 537600
WTR YR 1984 TOTAL 255136 MEAN 697 MAX 5370 MIN 140 AC-FT 506100

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 5.2 mi northeast of Arboles Post Office, and 8 mi upstream from mouth.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft, Colorado State Highway Department benchmark.

REMARKS.--Records good. Diversions for irrigation of about 2,800 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 383 ft³/s; 277,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s Sept. 6, 1970, gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft³/s, on basis of slope-area measurement of peak flow; minimum discharge, 11 ft³/s, Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr 19	0300	1,650	3.30	May 25	0500	*2,900	4.22
May 15	0300	2,720	4.12				

Minimum daily discharge, 85 ft³/s, Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	820	138	118	120	100	113	395	564	1560	450	198	425
2	726	138	115	110	110	128	330	552	1490	420	188	582
3	588	128	120	101	110	143	308	570	1350	385	209	486
4	500	122	125	113	110	146	340	705	1250	335	191	405
5	405	120	113	118	110	132	460	820	1140	294	213	321
6	370	120	85	115	110	128	820	1010	1140	273	321	281
7	350	118	97	113	110	128	836	1030	1050	249	355	249
8	335	115	100	115	113	140	916	1030	1040	229	298	221
9	326	125	110	120	113	164	1060	1210	852	225	253	198
10	316	106	110	115	110	209	740	1490	756	237	225	177
11	303	115	100	113	113	273	772	1630	740	233	209	167
12	281	115	108	120	108	230	733	2120	772	205	209	221
13	257	115	108	118	106	280	820	2330	852	202	194	177
14	245	115	108	122	115	340	836	2400	956	229	194	158
15	233	110	110	115	120	425	932	2610	1000	213	198	213
16	217	101	108	110	108	475	1100	2530	972	194	184	445
17	202	106	110	100	113	455	1320	2260	916	221	188	460
18	191	113	110	100	118	486	1450	2140	820	205	198	365
19	184	113	108	100	108	460	1500	1830	748	194	194	303
20	177	113	106	100	99	546	1290	1960	788	170	257	269
21	170	125	108	110	104	712	1040	2260	740	164	281	245
22	164	104	110	110	108	884	876	2420	684	164	245	237
23	158	101	115	100	108	607	804	2520	635	155	257	217
24	155	97	113	100	101	570	852	2630	570	140	450	229
25	149	110	110	100	108	635	1000	2640	558	174	445	213
26	146	106	113	100	106	540	868	2440	656	198	420	198
27	140	108	118	100	99	510	712	2250	594	191	375	213
28	138	104	122	100	101	420	649	2060	558	209	316	202
29	138	108	104	100	108	425	614	1910	492	205	277	180
30	138	118	90	100	---	410	628	1820	480	237	257	170
31	138	---	113	100	---	380	---	1590	---	233	233	---
TOTAL	8660	3427	3385	3358	3147	11494	25001	55531	26159	7233	8032	8227
MEAN	279	114	109	108	109	371	833	1791	872	233	259	274
MAX	820	138	125	122	120	884	1500	2640	1560	450	450	582
MIN	138	97	85	100	99	113	308	552	480	140	184	158
AC-FT	17180	6800	6710	6660	6240	22800	49590	110100	51890	14350	15930	16320

CAL YR 1983 TOTAL 197243 MEAN 540 MAX 2690 MIN 85 AC-FT 391200
WTR YR 1984 TOTAL 163654 MEAN 447 MAX 2640 MIN 85 AC-FT 324600

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.80 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. No diversion above station.

AVERAGE DISCHARGE.--22 years, 144 ft³/s; 104,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s, Sept. 6, 1970, gage height, 5.51 ft, from water-stage recorder, 6.76 ft, from floodmarks, from rating curve extended above 1,400 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s, Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 14	2200	1,110	2.93	May 24	2330	*1,360	3.17

Minimum daily discharge, 18 ft³/s, Jan. 23, 24, Feb. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	58	38	27	22	21	40	104	712	417	192	255
2	204	57	37	26	23	22	38	100	664	431	168	236
3	176	53	36	26	23	23	38	102	608	398	160	200
4	164	46	34	28	24	23	38	114	473	368	160	172
5	172	42	33	28	24	24	42	122	424	338	204	150
6	184	39	33	30	24	26	45	134	368	308	232	144
7	188	38	32	32	26	25	46	140	392	308	188	127
8	172	40	32	34	26	24	53	157	344	386	164	117
9	164	33	30	34	24	24	69	216	302	417	144	110
10	160	40	31	33	26	25	65	296	296	356	137	102
11	153	40	31	29	24	26	69	466	368	302	137	104
12	137	39	31	26	20	28	68	624	431	265	134	110
13	124	39	29	24	24	28	74	720	536	290	134	98
14	120	38	30	24	25	30	84	840	680	338	134	92
15	110	32	29	24	25	31	104	808	664	280	137	134
16	102	35	26	22	20	32	137	656	648	250	140	164
17	96	34	28	22	24	30	172	656	520	228	144	157
18	92	37	28	22	24	31	200	656	520	220	160	140
19	84	32	29	22	20	32	204	616	528	208	164	127
20	80	33	28	24	22	36	168	816	576	196	168	127
21	76	32	26	24	22	48	140	970	600	232	192	127
22	72	32	28	20	24	57	127	1100	568	212	193	130
23	68	36	28	18	24	50	130	1110	536	192	308	174
24	66	38	31	18	22	50	150	1170	504	188	608	240
25	65	39	31	19	22	52	157	1130	528	220	410	192
26	63	38	32	19	20	49	144	1100	576	255	356	172
27	62	38	33	19	18	49	137	988	600	212	275	180
28	60	39	30	19	18	45	130	916	512	228	224	160
29	60	38	22	20	21	43	117	889	466	255	192	144
30	60	38	22	20	---	42	110	848	445	240	176	134
31	58	---	24	22	---	42	---	760	---	232	160	---
TOTAL	3624	1173	932	755	661	1068	3096	19324	15389	8770	6295	4519
MEAN	117	39.1	30.1	24.4	22.8	34.5	103	623	513	283	203	151
MAX	232	58	38	34	26	57	204	1170	712	431	608	255
MIN	58	32	22	18	18	21	38	100	296	188	134	92
AC-FT	7190	2330	1850	1500	1310	2120	6140	38330	30520	17400	12490	8960

CAL YR 1983 TOTAL 59218 MEAN 162 MAX 1050 MIN 20 AC-FT 117500
WTR YR 1984 TOTAL 65606 MEAN 179 MAX 1170 MIN 18 AC-FT 130100

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 10, 1974; minimum, freezing point on many days during winter months each year.

09352900 - VALLECITO CREEK NEAR BAYFIELD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	TURBIDITY (NTU)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 03...	1630	168	75	6.4	6.0	--	1.1	K3	K6	32
JAN 12...	1200	18	75	7.0	.0	10.9	.20	<1	K6	40
JUN 04...	0930	480	68	7.0	3.0	10.1	.70	<1	K1	24
AUG 20...	0900	168	46	6.9	11.0	8.3	.50	K9	K120	34

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 03...	9.5	1.9	.80	.0	3.6	28	8.2	.40	.20	3.4
JAN 12...	12	2.4	1.2	.0	.40	34	10	.40	.20	4.0
JUN 04...	7.1	1.5	.70	.0	.70	17	5.9	.40	.20	2.9
AUG 20...	10	2.1	1.3	.1	.50	21	7.0	.20	.20	3.0

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT 03...	46	45	.06	21	<.10	.080	.30	<.010	<.010	.010
JAN 12...	48	51	.07	2.3	.11	.030	<.20	<.010	<.010	<.010
JUN 04...	24	30	.03	31	.11	.090	.40	.020	.010	.010
AUG 20...	24	37	.03	11	--	--	--	--	--	--

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 03...	1630	60	<1	17	<.5	<1	<1	<3	1	23	2
JUN 04...	0930	50	<1	13	3	2	<1	<3	3	29	<1

K BASED IN NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	<4	9	<.1	<10	4	<1	1	24	<6	5
JUN 04...	8	7	<.1	<10	3	<1	<1	20	<6	13

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
JUN 04...	0930	1.2	<.4	1.2	<.4	1.0	<.4	.13	.27

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 3,395 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24, 25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 119,320 acre-ft, June 30, elevation, 7,662.42 ft; minimum, 60,120 acre-ft, Oct. 28, elevation, 7,637.61 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,638.80	62,570	-
Oct. 31	7,637.79	60,480	-27,670
Nov. 30	7,639.65	64,360	+3,880
Dec. 31	7,641.35	67,990	+3,630
CAL YR 1983			+2,790
Jan. 31	7,642.67	70,880	+2,890
Feb. 29	7,643.41	72,520	+1,640
Mar. 31	7,644.80	75,640	+3,120
Apr. 30	7,647.38	81,570	+5,930
May 31	7,660.20	113,440	+31,870
June 30	7,662.42	119,320	+5,880
July 31	7,655.28	110,780	-18,540
Aug. 31	7,645.70	77,690	-23,090
Sept. 30	7,641.10	67,450	-10,240
WTR YR 1984			+4,880

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi upstream from Jack Creek, 2.0 mi upstream from Red Creek, and 11 mi north of Bayfield.

DRAINAGE AREA.--270 mi^2, approximately.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches.

COOPERATION.--Gage-height record is furnished by Pine River Irrigation District.

AVERAGE DISCHARGE.--13 years (water years 1928-40), 345 ft^3/s; 250,000 acre-ft/yr, prior to completion of Vallecito Reservoir: 44 years (water years 1941-84), 358 ft^3/s; 259,400 acre-ft/yr, subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s, July 27, 1957, gage height, 12.2 ft, from floodmarks at supplementary gage, from rating curve extended above 2,500 ft^3/s, on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); no flow Apr. 15-25, 1982 (result of no release from Vallecito Reservoir when concrete spillway was being repaired); minimum daily prior to construction of Vallecito Reservoir, 38 ft^3/s, Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,700 ft^3/s at 0900 May 30, gage height, 3.70 ft; minimum daily, 23 ft^3/s, Jan. 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	90	57	57	62	62	79	264	1520	896	902	600
2	393	92	57	57	62	62	79	261	1470	902	902	520
3	393	92	57	57	62	62	79	261	1470	902	902	520
4	393	74	57	57	62	62	79	258	1400	902	902	520
5	393	31	57	57	62	62	79	258	1360	894	902	520
6	393	31	57	57	62	62	79	258	1360	890	900	520
7	393	35	57	57	62	62	79	387	1450	890	900	520
8	393	35	57	57	62	62	79	596	1460	890	900	520
9	393	46	57	42	62	62	79	766	1430	882	900	520
10	393	81	57	23	62	62	79	945	1430	878	900	522
11	393	70	57	23	62	62	162	1010	1220	856	810	522
12	393	62	57	23	62	62	261	1010	1000	832	758	522
13	393	57	57	23	62	62	261	1020	950	832	780	522
14	393	57	57	23	62	62	261	1100	902	832	752	522
15	393	57	57	39	62	64	261	1150	873	832	748	522
16	393	57	57	62	62	64	261	1180	873	832	727	522
17	393	57	57	62	62	64	261	1250	873	832	715	511
18	393	57	57	62	62	64	264	1400	867	828	669	504
19	393	57	57	62	62	64	264	1480	867	826	669	504
20	393	57	57	62	62	49	264	1480	867	826	669	504
21	393	57	57	62	62	30	264	1560	867	826	669	502
22	309	57	57	62	62	79	264	1620	867	826	669	500
23	251	57	57	62	62	79	264	1630	873	826	643	500
24	247	57	57	62	62	79	264	1630	873	826	628	449
25	247	57	57	62	62	79	264	1640	873	866	628	330
26	247	57	57	62	62	79	264	1660	873	890	628	133
27	247	57	57	62	62	79	264	1690	878	896	628	465
28	146	57	57	62	62	79	264	1690	887	896	628	465
29	87	57	57	62	62	79	264	1690	896	896	628	465
30	90	57	57	62	---	79	264	1610	896	900	628	465
31	90	---	57	62	---	79	---	1550	---	902	628	---
TOTAL	10253	1765	1767	1644	1798	2057	5950	34304	32425	26804	23312	14711
MEAN	331	58.8	57.0	53.0	62.0	66.4	198	1107	1081	865	752	490
MAX	432	92	57	62	62	79	264	1690	1520	902	902	600
MIN	87	31	57	23	62	30	79	258	867	826	628	133
AC-FT	20340	3500	3500	3260	3570	4080	11800	68040	64310	53170	46240	29180

CAL YR 1983 TOTAL 155702 MEAN 427 MAX 1770 MIN 31 AC-FT 308800
WTR YR 1984 TOTAL 156790 MEAN 428 MAX 1690 MIN 23 AC-FT 311000

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 13 mi upstream from mouth.

DRAINAGE AREA.--510 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter pereiod, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 221 ft³/s; 160,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discnarge, 6,400 ft³/s, July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft³/s; minimum daily, 6.1, ft³/s May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911, at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,370 ft³/s at 1100 May 24, gage height, 5.89 ft; minimum daily, 46 ft³/s, Jan. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	502	118	92	95	85	118	210	254	1100	390	418	466
2	342	115	100	88	90	136	184	238	1040	385	406	430
3	290	112	105	85	90	178	169	230	1020	365	390	322
4	258	110	112	95	90	184	172	222	1010	365	395	302
5	250	92	92	88	90	166	187	226	1000	350	424	250
6	238	70	90	82	90	148	226	238	1040	355	568	210
7	222	64	90	82	90	160	250	250	1050	365	556	194
8	230	58	95	82	95	194	258	418	1050	375	484	198
9	258	60	92	82	95	266	310	598	924	395	442	184
10	250	60	88	66	90	385	282	732	908	395	406	178
11	246	76	82	57	95	430	282	820	804	370	326	194
12	250	74	82	49	90	350	424	748	568	322	526	302
13	250	70	80	46	90	342	460	724	442	355	556	198
14	238	62	82	60	95	334	478	724	385	395	532	184
15	290	58	80	54	95	472	496	796	322	355	526	190
16	365	58	82	55	90	365	520	860	375	375	520	198
17	360	58	80	80	95	322	520	908	360	355	448	187
18	370	78	82	80	98	302	508	988	342	346	466	163
19	370	80	80	80	100	278	526	1110	334	350	360	160
20	365	78	85	85	98	274	496	1080	375	334	406	160
21	360	92	90	85	98	274	442	1100	350	338	395	160
22	346	85	90	85	98	302	406	1160	346	338	442	169
23	258	76	98	80	95	262	385	1190	346	342	574	172
24	250	78	92	80	92	250	375	1280	346	342	772	166
25	246	85	95	80	95	262	395	1150	350	375	448	122
26	246	105	110	80	92	246	380	1160	380	436	412	154
27	246	98	133	80	92	242	342	1160	385	442	395	133
28	234	98	136	80	98	210	330	1200	355	460	385	160
29	136	100	108	80	100	206	322	1200	385	472	380	178
30	125	95	108	80	---	202	290	1150	406	472	370	187
31	118	---	102	80	---	194	---	1070	---	442	380	---
TOTAL	8509	2463	2933	2381	2711	8054	10625	24984	18098	11756	14108	6271
MEAN	274	82.1	94.6	76.8	93.5	260	354	806	603	379	455	209
MAX	502	118	136	95	100	472	526	1280	1100	472	772	466
MIN	118	58	80	46	85	118	169	222	322	322	326	122
AC-FT	16880	4890	5820	4720	5380	15980	21070	49560	35900	23320	27980	12440

CAL YR 1983 TOTAL 117649 MEAN 322 MAX 1340 MIN 58 AC-FT 233400
WTR YR 1984 TOTAL 112893 MEAN 308 MAX 1280 MIN 46 AC-FT 223900

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Part of flow is return waste from irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 31.1 ft^3/s; 22,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft^3/s, Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft^3/s, on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft^3/s, Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 5	2400	298	1.75	Aug. 24	0200	*824	2.93

Minimum daily discharge, 4.4 ft^3/s, Apr. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	6.1	7.5	5.6	6.5	37	10	29	66	74	82	71
2	92	5.6	7.4	5.0	6.5	54	6.1	23	66	76	80	69
3	64	5.2	7.5	4.8	6.5	60	4.8	24	62	72	78	57
4	62	5.2	7.0	5.5	6.5	38	4.4	29	64	71	84	48
5	62	5.2	6.0	5.5	6.5	24	4.4	29	71	78	106	57
6	60	5.2	6.0	5.5	6.5	11	5.6	27	74	72	174	64
7	60	5.2	5.5	5.0	6.5	12	8.5	27	69	71	120	67
8	59	5.6	5.5	5.5	7.0	15	9.2	27	66	72	100	67
9	55	5.6	6.0	5.5	7.0	20	8.5	29	66	72	92	66
10	50	5.2	6.0	5.0	6.5	28	7.4	32	66	72	96	57
11	48	5.2	5.5	5.0	7.0	30	6.5	39	64	71	94	57
12	50	5.2	6.0	6.0	6.5	26	6.1	47	60	69	96	64
13	50	5.6	6.0	6.5	6.5	24	5.6	55	57	69	98	60
14	50	5.2	6.0	6.9	7.0	26	5.6	60	57	76	94	59
15	50	4.8	6.0	6.5	7.5	32	6.1	59	59	74	100	62
16	28	4.8	6.0	6.5	7.0	16	6.1	69	66	72	86	66
17	11	5.2	6.0	6.0	7.0	11	7.4	60	67	74	80	67
18	10	6.9	6.0	6.0	7.5	10	38	64	66	74	102	64
19	8.5	6.9	5.5	6.0	7.0	7.8	8.5	64	66	74	92	66
20	7.4	6.1	5.6	6.0	6.5	7.4	9.2	64	67	74	94	67
21	6.9	10	6.0	6.5	6.5	8.5	7.8	62	67	78	90	67
22	6.9	6.5	6.0	6.5	7.0	9.2	6.9	54	67	78	88	67
23	6.5	6.0	6.5	6.0	7.0	8.5	6.1	55	66	78	130	66
24	6.1	6.0	7.8	6.0	6.5	6.5	6.1	55	67	76	360	62
25	6.1	6.9	7.4	6.0	6.9	6.9	6.1	48	71	78	100	59
26	6.1	6.5	16	6.0	6.5	6.5	6.1	52	69	78	90	69
27	6.1	7.0	30	6.0	6.9	7.8	6.1	52	66	80	62	36
28	6.1	6.5	36	6.0	7.4	6.9	7.4	57	69	80	59	66
29	6.1	7.0	12	6.0	21	5.6	8.5	54	69	82	59	66
30	6.1	7.5	10	6.0	---	6.1	9.0	57	76	82	57	69
31	6.1	---	8.5	6.5	---	7.4	---	57	---	82	62	---
TOTAL	1072.0	179.9	269.2	181.8	211.2	569.1	238.1	1460	1986	2329	3105	1882
MEAN	34.6	6.00	8.68	5.86	7.28	18.4	7.94	47.1	66.2	75.1	100	62.7
MAX	126	10	36	6.9	21	60	38	69	76	82	360	71
MIN	6.1	4.8	5.5	4.8	6.5	5.6	4.4	23	57	69	57	36
AC-FT	2130	357	534	361	419	1130	472	2900	3940	4620	6160	3730

CAL YR 1983 TOTAL 14978.9 MEAN 41.0 MAX 279 MIN 4.8 AC-FT 29710
WTR YR 1984 TOTAL 13483.3 MEAN 36.8 MAX 360 MIN 4.4 AC-FT 26740

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi^2.

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres above station. Natural regulation by many lakes and regulation for power above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--79 years (water years 1897-1900, 1905, 1911-84), 841 ft^3/s; 609,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s, Oct. 5, 1911, gage height, 11 ft, present site and datum, from rating curve extended above 13,000 ft^3/s; minimum daily, 94 ft^3/s, Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	0800	5,200	6.07	June 15	0800	4,130	5.44
May 25	1100	*7,480	7.03				

Minimum daily discharge, 190 ft^3/s, Jan. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	315	270	285	242	285	356	780	4460	2640	1210	950
2	790	285	295	266	246	290	332	800	4280	2680	1110	1120
3	682	300	285	246	250	300	315	800	3790	2670	1040	890
4	637	270	285	254	254	310	350	880	3160	2440	1050	820
5	586	266	275	275	258	300	374	940	2880	2290	1000	750
6	538	262	262	275	258	300	394	1030	2530	2120	1120	673
7	530	275	275	275	262	290	443	1070	2370	1980	1110	637
8	530	285	275	275	266	295	474	1060	2350	1840	950	578
9	506	315	275	280	270	305	570	1210	1930	1970	890	546
10	498	262	275	275	280	295	578	1600	1720	1930	880	506
11	522	270	280	266	280	326	586	2180	1810	1900	820	490
12	490	262	275	266	270	332	578	3000	2180	1620	750	506
13	458	258	270	254	275	326	594	3760	2670	1640	740	458
14	436	258	270	275	285	338	664	3970	3450	1640	740	450
15	415	258	270	270	280	350	760	4940	3720	1700	770	443
16	422	242	262	266	275	356	930	4460	3580	1570	830	506
17	394	250	266	260	280	350	1160	4120	3020	1510	830	602
18	374	254	280	240	275	350	1370	4300	2810	1330	1010	530
19	380	254	280	230	270	344	1480	3760	2710	1210	940	570
20	362	238	280	220	258	362	1300	4370	2720	1310	910	546
21	344	246	275	210	258	415	1070	5330	2970	1250	1060	530
22	332	242	262	206	280	522	940	5990	3260	1270	1020	546
23	320	230	266	190	275	506	910	6650	3020	1170	1210	506
24	320	250	270	190	270	458	960	7040	2810	1160	1540	586
25	344	262	290	200	280	466	1150	7070	2850	1220	1480	619
26	320	270	305	230	258	466	1080	6780	3350	1340	1550	570
27	320	262	310	238	224	429	970	6320	3430	1210	1280	554
28	315	262	295	238	221	380	910	5860	3320	1300	1080	570
29	332	250	270	242	258	362	860	5480	3020	1340	980	498
30	285	250	262	238	---	362	810	5260	2970	1550	900	443
31	295	---	270	238	---	362	---	4860	---	1480	820	---
TOTAL	13847	7903	8580	7673	7658	11132	23268	115670	89140	52280	31620	17993
MEAN	447	263	277	248	264	359	776	3731	2971	1686	1020	600
MAX	790	315	310	285	285	522	1480	7070	4460	2680	1550	1120
MIN	285	230	262	190	221	285	315	780	1720	1160	740	443
AC-FT	27470	15680	17020	15220	15190	22080	46150	229400	176800	103700	62720	35690

CAL YR 1983 TOTAL 377780 MEAN 1035 MAX 5720 MIN 209 AC-FT 749300
WTR YR 1984 TOTAL 386764 MEAN 1057 MAX 7070 MIN 190 AC-FT 767100

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, CO, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi^2, approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft, higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft, higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam, capacity, 40,100 acre-ft, about 30 mi upstream on Florida River since November 1963.

AVERAGE DISCHARGE.--51 years, 906 ft^3/s; 656,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft^3/s, June 19, 1949, gage height, 11.45 ft; minimum, 63 ft^3/s, Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in October 1911 exceeded all other known floods at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 24	2315	*8,010	9.34	June 15	1200	4,030	7.39

Minimum daily discharge, 242 ft^3/s, Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	885	358	313	310	270	332	462	824	4570	2740	1300	1160
2	915	327	315	286	272	355	431	857	4340	2690	1190	1300
3	781	342	302	266	275	373	405	871	3860	2710	1110	1090
4	706	324	296	270	277	382	428	902	3350	2470	1090	954
5	654	328	319	294	287	364	444	1090	2980	2310	1050	865
6	608	317	306	290	286	350	483	1200	2710	2170	1120	795
7	596	323	342	294	293	360	544	1230	2390	2040	1210	753
8	599	334	346	298	300	360	565	1300	2440	1910	1050	690
9	573	378	328	302	304	405	667	1390	2080	1960	954	654
10	563	342	328	298	311	450	703	1640	1900	1980	954	612
11	568	332	324	286	316	534	668	2070	1950	1980	918	630
12	577	337	311	294	302	516	667	2850	2200	1730	886	672
13	529	328	298	278	296	510	679	3570	2370	1680	851	594
14	504	328	300	314	320	540	721	3860	3580	1710	830	564
15	490	332	307	306	316	588	792	4630	3910	1730	844	552
16	483	310	296	290	305	504	944	4770	3820	1640	872	600
17	462	314	287	272	305	510	1160	4280	3410	1500	936	704
18	443	350	306	258	311	486	1210	4380	3070	1400	1130	648
19	436	355	310	253	300	462	1360	4130	2800	1280	1040	654
20	422	328	314	250	291	462	1360	4330	2770	1330	1010	654
21	409	342	314	260	287	528	1160	5110	3010	1330	1100	630
22	398	350	310	270	306	630	992	5790	3290	1330	1160	642
23	389	304	323	280	312	636	949	6470	3160	1260	1310	630
24	373	322	306	290	301	588	996	6920	2870	1210	1740	642
25	402	344	314	310	306	558	1190	7130	2920	1260	1640	725
26	382	359	350	310	304	576	1160	6910	3380	1320	1630	690
27	374	333	382	309	256	546	1020	6570	3490	1240	1430	654
28	370	330	373	305	242	516	959	6060	3380	1240	1240	690
29	386	319	302	290	282	460	913	5660	3070	1310	1110	648
30	340	310	319	282	---	450	858	5200	3020	1420	999	606
31	337	---	314	280	---	470	---	4710	---	1470	1030	---
TOTAL	15954	10000	9855	8895	8533	14801	24890	116704	92090	53350	34734	21702
MEAN	515	333	318	287	294	477	830	3765	3070	1721	1120	723
MAX	915	378	382	314	320	636	1360	7130	4570	2740	1740	1300
MIN	337	304	287	250	242	332	405	824	1900	1210	830	552
AC-FT	31640	19830	19550	17640	16930	29360	49370	231500	182700	105800	68890	43050

CAL YR 1983 TOTAL 438611 MEAN 1202 MAX 6470 MIN 242 AC-FT 870000
WTR YR 1984 TOTAL 411508 MEAN 1124 MAX 7130 MIN 242 AC-FT 816200

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi^2, approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft, National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft, higher.

REMARKS.--Records good except those for winter period, which are fair. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres in Cherry Creek drainage.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--68 years (water years 1906, 1918-84), 44.8 ft^3/s; 32,460 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 13	0030	457	3.31	May 25	2100	*583	3.58

Minimum daily discharge, 6.0 ft^3/s, Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	13	9.5	7.3	7.7	11	35	49	202	31	17	22
2	45	13	10	7.3	7.7	11	34	48	188	33	17	20
3	35	13	10	7.7	7.7	11	34	46	154	32	17	17
4	28	13	9.5	7.3	7.7	11	34	49	128	29	18	14
5	27	12	9.5	7.3	7.7	11	34	50	134	29	18	15
6	27	12	9.0	7.3	7.7	11	38	54	98	27	18	16
7	27	12	9.0	7.7	8.2	11	41	60	86	28	18	14
8	27	13	9.5	7.7	8.2	12	46	70	78	27	18	14
9	26	12	9.5	7.7	8.2	12	57	97	70	26	18	13
10	26	12	9.5	7.7	8.2	13	56	155	70	24	18	12
11	26	11	9.5	7.5	8.2	13	58	228	82	19	18	13
12	25	11	9.5	7.5	8.5	13	57	290	95	16	22	13
13	25	11	9.5	7.0	9.0	13	61	330	110	16	22	12
14	24	11	9.0	8.0	9.5	14	72	315	120	15	18	11
15	23	10	9.5	7.5	10	14	95	350	123	16	18	11
16	21	10	8.6	7.0	9.5	16	124	290	107	18	24	12
17	20	10	8.2	7.0	10	18	139	276	86	18	21	12
18	20	11	8.2	6.0	10	18	152	315	82	19	18	12
19	19	10	8.2	6.5	10	20	139	305	76	22	16	11
20	18	11	8.6	7.0	11	23	109	360	74	16	17	11
21	18	12	8.0	7.0	11	28	86	390	70	16	16	11
22	18	11	7.7	7.0	11	35	73	408	63	21	23	11
23	17	10	8.2	7.0	11	47	67	414	54	18	48	11
24	16	10	7.7	7.5	11	46	73	444	48	17	47	11
25	16	10	8.2	8.0	10	48	86	444	47	31	36	10
26	16	10	8.2	8.5	11	45	76	385	46	32	36	11
27	15	9.5	8.6	8.5	11	41	67	355	40	16	30	11
28	14	9.5	7.7	8.5	11	38	61	320	36	17	25	10
29	14	9.5	7.5	8.6	11	38	56	276	36	18	21	10
30	14	9.5	7.5	8.2	---	37	52	241	38	22	20	10
31	14	---	7.3	8.2	---	36	---	209	---	15	18	---
TOTAL	713	332.0	270.4	233.0	272.7	715	2112	7623	2641	684	691	381
MEAN	23.0	11.1	8.72	7.52	9.40	23.1	70.4	246	88.0	22.1	22.3	12.7
MAX	52	13	10	8.6	11	48	152	444	202	33	48	22
MIN	14	9.5	7.3	6.0	7.7	11	34	46	36	15	16	10
AC-FT	1410	659	536	462	541	1420	4190	15120	5240	1360	1370	756

CAL YR 1983 TOTAL 23309.0 MEAN 63.9 MAX 485 MIN 7.3 AC-FT 46230
WTR YR 1984 TOTAL 16668.1 MEAN 45.5 MAX 444 MIN 6.0 AC-FT 33060

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good except those for winter peroid, which are fair. Diversions above station for irrigation of about 15,000 acres, mostly above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--64 years, 35.3 ft³/s; 25,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft³/s, on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 437 ft³/s at 2030 Aug. 23, gage height, 2.98 ft; minimum daily, 3.5 ft³/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	24	26	24	28	95	73	68	30	5.1	38
2	16	15	26	23	23	31	87	56	91	25	4.8	10
3	14	15	26	22	23	35	80	49	70	24	5.4	10
4	14	14	24	23	24	32	82	41	74	26	5.8	6.2
5	14	14	23	23	26	31	82	45	80	24	5.8	6.2
6	13	15	21	21	26	28	90	40	78	22	5.4	8.0
7	13	15	23	21	24	30	101	40	58	21	14	6.2
8	13	16	25	21	22	33	111	42	51	20	7.5	6.2
9	13	17	26	21	21	36	131	46	38	20	5.8	6.2
10	14	16	26	20	23	40	124	69	39	25	4.2	4.8
11	14	15	25	21	21	49	128	111	43	19	5.1	16
12	14	15	25	19	19	48	117	166	48	16	14	17
13	14	16	24	18	21	50	122	200	55	15	12	6.6
14	15	16	23	22	23	55	123	139	68	13	3.8	5.8
15	15	16	26	20	20	67	145	171	67	10	6.2	5.8
16	15	16	26	16	19	77	175	162	70	10	6.6	6.6
17	15	16	27	18	23	86	212	116	67	8.5	6.2	6.2
18	15	21	25	14	21	88	232	118	69	8.0	8.0	5.1
19	15	20	26	16	19	88	242	111	61	8.5	8.0	4.8
20	15	19	26	18	19	96	208	134	55	9.0	6.2	6.2
21	15	21	24	18	20	106	160	173	52	7.5	5.8	6.2
22	16	21	29	18	23	124	132	202	47	7.0	5.8	4.8
23	16	19	26	18	23	117	111	238	43	5.1	43	4.4
24	16	18	24	19	23	118	95	230	43	6.6	46	3.5
25	15	20	27	20	26	124	103	182	44	7.0	14	4.4
26	14	20	31	22	22	120	107	173	45	7.0	10	5.8
27	13	18	35	22	23	110	87	129	40	5.8	12	6.6
28	13	.8	31	23	23	99	87	95	36	7.5	14	5.8
29	14	20	21	23	26	92	80	60	31	7.0	14	4.8
30	14	22	18	23	---	97	80	67	34	13	13	5.4
31	15	---	20	24	---	90	---	55	---	5.4	22	---
TOTAL	449	519	783	633	650	2225	3729	3533	1665	432.9	339.5	233.6
MEAN	14.5	17.3	25.3	20.4	22.4	71.8	124	114	55.5	14.0	11.0	7.79
MAX	17	22	35	26	26	124	242	238	91	30	46	38
MIN	13	14	18	14	19	28	80	40	31	5.1	3.8	3.5
AC-FT	891	1030	1550	1260	1290	4410	7400	7010	3300	859	673	463

CAL YR 1983 TOTAL 26176.7 MEAN 71.7 MAX 482 MIN 2.9 AC-FT 51920
WTR YR 1984 TOTAL 15192.0 MEAN 41.5 MAX 242 MIN 3.5 AC-FT 30130

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR-CO-83-3: drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 10,000 acres above station. One diversion above station for irrigation of about 100 acres below. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--56 years, 52.7 ft^3/s; 38,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s, Oct. 14, 1941, gage height, 7.30 ft, present site and datum, from rating curve extended above 200 ft^3/s, on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft, Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft^3/s at 0330 Aug. 24, gage height, 4.85 ft, only peak above base of 700 ft^3/s; minimum daily, 1.9 ft^3/s, Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	17	30	24	20	32	104	116	163	7.0	26	107
2	70	20	31	22	20	42	96	109	151	6.4	16	41
3	56	20	29	21	22	64	90	106	122	6.7	10	33
4	51	21	36	20	22	69	74	106	93	5.2	7.3	28
5	46	22	26	22	24	50	74	130	76	4.3	7.0	24
6	36	20	14	22	24	37	87	155	134	3.9	7.0	18
7	34	19	20	22	26	35	104	183	104	3.4	5.5	16
8	33	20	22	22	24	43	130	195	80	2.7	2.7	15
9	31	33	24	20	22	55	161	240	63	2.4	2.2	15
10	29	30	26	20	26	94	153	295	48	9.4	2.2	14
11	27	25	25	20	27	121	136	384	34	7.0	2.4	50
12	25	25	29	22	20	95	126	438	24	6.1	1.9	70
13	24	25	22	22	22	83	127	500	20	5.0	9.2	22
14	25	24	24	20	36	89	144	441	18	7.6	6.7	18
15	26	24	28	20	29	125	193	508	18	10	17	17
16	25	20	17	17	36	134	270	568	17	9.3	80	27
17	24	20	24	17	33	126	318	452	20	8.2	19	19
18	24	26	24	17	27	110	369	399	17	13	59	17
19	24	37	28	17	24	94	381	375	14	12	25	16
20	24	28	27	17	19	96	303	372	13	6.7	27	14
21	23	27	21	18	20	116	262	399	13	4.5	28	14
22	22	31	10	19	27	142	211	396	11	3.4	24	13
23	21	27	27	19	26	133	187	402	8.6	3.2	43	13
24	20	22	31	18	20	108	203	402	8.2	8.2	271	13
25	20	26	30	18	22	103	242	390	8.2	10	50	13
26	20	29	33	19	19	103	207	345	8.9	10	36	14
27	20	17	50	19	18	94	173	351	10	7.0	31	14
28	19	14	55	19	22	86	144	321	7.3	6.7	26	15
29	20	18	33	19	29	76	139	270	6.4	7.9	24	14
30	19	28	19	19	---	74	134	225	6.4	88	20	12
31	18	---	22	20	---	80	---	187	---	52	84	---
TOTAL	956	715	837	611	706	2709	5342	9760	1317.0	337.2	970.1	716
MEAN	30.8	23.8	27.0	19.7	24.3	87.4	178	315	43.9	10.9	31.3	23.9
MAX	100	37	55	24	36	142	381	568	163	88	271	107
MIN	18	14	10	17	18	32	74	106	6.4	2.4	1.9	12
AC-FT	1900	1420	1660	1210	1400	5370	10600	19360	2610	669	1920	1420

CAL YR 1983 TOTAL 40590.6 MEAN 111 MAX 600 MIN 9.6 AC-FT 80510
WTR YR 1984 TOTAL 24976.3 MEAN 68.2 MAX 568 MIN 1.9 AC-FT 49540

09371000 MANCOS RIVER NEAR TOWAOC, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
NOV 29...	1220	11	1710	8.1	1.5	840	180	95	100	2
DEC 19...	0955	22	1790	7.8	2.5	950	200	110	120	2
JAN 06...	1050	15	1750	8.6	.0	910	200	100	120	2
FEB 21...	1515	9.9	1700	7.6	6.0	950	200	110	130	2
MAR 07...	0950	22	1630	8.4	.5	800	170	92	120	2
APR 16...	1245	322	603	7.5	10.5	230	53	24	27	.8
MAY 25...	0830	388	340	7.8	15.0	150	39	12	13	.5
JUN 08...	1330	78	866	7.5	18.0	390	91	40	45	1
JUL 18...	0950	12	1570	7.4	21.0	730	150	86	97	2
AUG 21...	1010	31	1540	8.1	22.0	780	190	74	88	1
SEP 27...	1230	14	1700	6.9	16.0	810	160	100	110	2

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
NOV 29...	3.5	228	820	14	9.8	1400	1.8	40	.32
DEC 19...	2.6	217	900	16	9.6	1500	2.0	87	.49
JAN 06...	3.3	233	930	14	10	1500	2.1	61	.37
FEB 21...	3.4	227	920	17	9.3	1500	2.1	41	.42
MAR 07...	3.9	214	770	15	9.0	1300	1.8	77	.27
APR 16...	2.2	93	190	4.1	8.1	360	.50	317	<.10
MAY 25...	1.0	69	97	1.8	7.6	210	.29	223	.14
JUN 08...	2.6	143	350	6.3	8.7	630	.86	133	<.10
JUL 18...	4.2	148	770	12	9.4	1200	1.7	40	<.10
AUG 21...	6.2	142	850	11	11	1300	1.8	108	.23
SEP 27...	3.5	165	840	14	10	1300	1.8	49	<.10

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft upstream from mouth, 0.30 mi upstream from McElmo Fall, and 1.2 mi southwest of Cortez.

DRAINAGE AREA.--34.0 mi².

PERIOD OF RECORD.--April 1978 to current year. Water-quality data available, April 1978 to December 1981.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Diversions for irrigation above station.

AVERAGE DISCHARGE.--6 years, 13.8 ft³/s; 10,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft³/s, July 12, 1981, gage height, 4.36 ft; minimum daily, 0.28 ft³/s, Apr. 30 to May 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 76 ft³/s at 0730 July 30, gage height, 3.17 ft; minimum daily, 2.5 ft³/s, May 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	9.9	10	6.5	4.4	7.4	19	5.2	5.7	17	32	22
2	25	9.6	13	5.0	4.4	7.2	16	5.0	6.6	17	29	22
3	19	9.9	14	4.8	4.8	7.4	17	4.8	6.6	15	27	21
4	16	10	14	4.8	5.0	6.0	11	4.7	6.4	14	27	19
5	15	10	12	5.5	5.5	5.0	10	4.6	15	15	24	20
6	13	10	10	5.0	6.0	5.0	9.5	4.5	24	15	23	20
7	11	10	9.2	5.0	6.5	5.5	9.5	4.2	22	16	21	18
8	9.9	14	8.7	5.0	6.5	6.4	9.5	4.1	22	16	23	16
9	9.9	14	8.4	5.5	6.5	6.6	12	4.2	24	16	23	17
10	9.4	12	8.7	5.0	7.0	6.4	14	4.6	24	15	22	17
11	8.9	12	7.4	5.0	6.9	8.7	13	5.2	20	15	18	18
12	7.8	12	6.3	4.8	5.5	9.0	13	4.0	18	13	15	17
13	8.0	12	6.4	4.4	6.5	7.4	11	2.5	18	15	16	18
14	8.4	11	6.0	4.2	8.7	7.7	10	2.5	18	15	16	18
15	8.4	11	6.3	4.2	7.0	8.5	9.5	2.5	18	18	17	22
16	8.7	11	5.5	4.2	6.0	7.8	8.0	3.3	17	17	21	24
17	8.7	11	4.5	4.0	7.7	7.2	7.0	3.4	19	15	25	22
18	8.9	21	5.4	3.6	7.0	6.8	6.0	3.3	16	15	25	19
19	8.4	15	5.7	3.6	5.5	6.4	6.0	3.7	14	15	24	18
20	8.2	12	6.4	3.6	4.8	6.4	8.0	3.7	15	15	26	16
21	8.4	13	7.5	3.6	5.5	6.0	8.5	4.0	15	16	26	14
22	8.7	12	8.0	4.0	6.4	7.0	7.0	4.0	15	16	24	13
23	8.7	11	7.5	4.0	6.0	6.5	6.0	3.5	14	22	38	17
24	8.5	11	7.4	4.4	5.5	6.0	5.5	3.5	15	32	36	15
25	8.5	11	9.9	4.0	6.8	9.0	6.4	4.1	18	38	32	14
26	8.4	10	21	3.8	5.0	13	5.7	4.6	19	48	28	18
27	8.0	9.0	41	4.0	4.6	11	5.0	4.6	18	56	25	17
28	7.0	9.0	24	4.2	5.0	9.0	5.9	4.6	16	58	24	15
29	6.4	9.5	10	4.2	6.0	9.0	6.9	4.3	16	60	22	13
30	7.0	11	7.5	4.0	---	13	5.5	4.3	18	61	22	13
31	10	---	7.0	4.0	---	18	---	4.6	---	32	22	---
TOTAL	334.2	343.9	318.7	137.9	173.0	246.3	281.4	126.1	493.3	748	753	533
MEAN	10.8	11.5	10.3	4.45	5.97	7.95	9.38	4.07	16.4	24.1	24.3	17.8
MAX	32	21	41	6.5	8.7	18	19	5.2	24	61	38	24
MIN	6.4	9.0	4.5	3.6	4.4	5.0	5.0	2.5	5.7	13	15	13
AC-FT	663	682	632	274	343	489	558	250	978	1480	1490	1060

CAL YR 1983 TOTAL 6861.4 MEAN 18.8 MAX 46 MIN 4.5 AC-FT 13610
WTR YR 1984 TOTAL 4488.8 MEAN 12.3 MAX 61 MIN 2.5 AC-FT 8900

NOTE.--NO GAGE-HEIGHT RECORD MAR. 21 TO APR. 23.

09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi upstream from Alkali Canyon and 4.0 mi southwest of Cortez.

DRAINAGE AREA.--147 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 26.5 ft^3/s; 19,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 864 ft^3/s, July 15, 1981, gage height, 6.08 ft, from rating curve extended above 190 ft^3/s, on basis of step-backwater method; minimum daily, 1.5 ft^3/s, Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 723 ft^3/s at 2300 Aug. 23, gage height, 5.61 ft; minimum daily, 10 ft^3/s, Jan. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	36	26	18	12	27	38	11	23	34	45	54
2	52	35	29	16	13	24	30	11	23	34	41	55
3	43	36	38	16	14	26	33	11	24	29	34	45
4	38	34	36	17	14	22	22	11	23	27	34	43
5	36	34	28	18	14	17	20	12	34	26	34	38
6	32	34	25	17	16	15	18	11	83	26	32	37
7	18	34	27	17	17	14	19	11	81	28	30	37
8	18	43	31	17	16	14	18	11	77	29	31	34
9	19	50	31	16	15	15	23	14	66	31	31	31
10	19	39	25	16	16	20	27	16	66	30	26	35
11	19	40	24	15	16	26	24	17	56	28	28	36
12	19	39	24	13	13	30	23	20	49	24	25	37
13	18	39	24	13	15	23	21	33	41	26	27	38
14	18	38	22	13	19	22	20	38	35	28	28	38
15	18	27	23	12	17	29	19	32	38	32	28	40
16	18	27	19	10	15	26	15	22	42	29	34	47
17	18	30	23	10	19	20	14	26	52	26	58	49
18	18	65	23	11	14	18	11	19	49	23	53	41
19	18	57	24	11	13	17	11	16	46	23	43	38
20	30	34	24	12	12	12	15	15	49	23	44	31
21	39	37	25	11	12	11	17	14	46	24	45	28
22	31	38	26	12	14	14	13	14	45	24	38	26
23	32	27	24	11	13	13	12	15	45	29	85	24
24	36	27	24	11	13	12	11	15	45	52	157	37
25	38	28	29	11	13	17	11	19	50	55	60	39
26	40	28	61	11	11	25	13	22	56	68	72	41
27	39	22	126	12	12	22	12	24	49	72	70	53
28	27	22	90	11	13	18	12	23	43	76	66	48
29	27	22	25	11	23	17	14	22	34	76	61	31
30	28	26	24	11	---	24	12	21	38	112	57	22
31	34	---	22	12	---	35	---	21	---	49	55	---
TOTAL	913	1048	1002	412	424	625	548	567	1408	1193	1472	1153
MEAN	29.5	34.9	32.3	13.3	14.6	20.2	18.3	18.3	46.9	38.5	47.5	38.4
MAX	73	65	126	18	23	35	38	38	83	112	157	55
MIN	18	22	19	10	11	11	11	11	23	23	25	22
AC-FT	1810	2080	1990	817	841	1240	1090	1120	2790	2370	2920	2290

CAL YR 1983 TOTAL 13889 MEAN 38.1 MAX 194 MIN 10 AC-FT 27550
WTR YR 1984 TOTAL 10765 MEAN 29.4 MAX 157 MIN 10 AC-FT 21350

09371492 MUD CREEK AT HIGHWAY 32 NEAR CORTEZ, CO

LOCATION.--Lat 37°18'46", long 108°39'38", in SW¼ sec.6, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 1 mi upstream from mouth, and 4.5 mi southwest of Cortez.

DRAINAGE AREA.--33.6 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,765 ft, from topographic map.

REMARKS.--Records good. Several observations of specific conductance and water temperature were obtained, and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 598 ft^3/s, Aug. 24, 1982, gage height, 8.53 ft; from rating curve extended above 36 ft^3/s, on basis of slope-area measurement; minimum daily, 1.2 ft^3/s, Feb. 13, 14, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 99 ft^3/s at 2400 Aug. 23, gage height, 3.50 ft; minimum daily, 2.1 ft^3/s, Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	3.7	3.0	4.8	2.6	3.0	5.6	3.0	14	17	18	17
2	16	3.5	4.2	4.6	2.7	3.0	5.2	3.0	15	16	18	15
3	17	3.5	4.4	4.4	2.6	3.2	4.6	3.0	15	14	16	15
4	16	3.4	4.6	3.8	2.6	3.2	4.0	3.0	15	13	14	14
5	12	3.4	3.5	3.5	2.6	2.7	3.5	3.0	18	13	15	12
6	11	3.5	3.2	3.7	2.6	2.6	3.5	2.9	24	13	19	12
7	10	3.4	2.9	3.7	2.7	2.6	3.5	2.7	18	13	19	12
8	9.2	4.4	2.9	3.7	2.9	2.7	3.5	2.7	17	13	17	14
9	9.0	4.4	2.9	3.8	2.9	2.9	3.5	3.0	16	14	15	14
10	9.2	3.7	3.0	3.7	3.0	2.9	3.5	3.0	14	14	15	13
11	9.7	3.7	3.0	3.7	3.2	3.5	3.4	3.2	16	14	19	15
12	9.7	3.7	3.2	3.7	3.2	3.4	3.2	4.2	16	12	22	15
13	10	3.5	3.0	3.7	2.9	3.4	2.6	6.0	15	14	24	14
14	10	3.4	3.0	3.5	3.4	3.2	2.3	8.4	16	15	24	15
15	10	3.4	3.8	3.5	3.5	3.4	2.4	10	16	15	22	15
16	9.7	3.4	3.7	3.0	3.7	3.4	2.3	12	17	14	24	15
17	10	3.5	3.7	3.0	3.8	3.2	2.1	14	16	14	26	16
18	10	7.2	3.5	3.2	3.7	3.2	2.3	12	14	14	23	15
19	10	4.2	3.7	3.2	3.4	3.0	2.4	12	13	13	21	15
20	10	3.5	4.0	3.4	3.2	4.4	3.4	12	14	12	15	14
21	10	3.8	3.8	3.2	3.8	5.8	3.4	12	13	12	14	14
22	10	3.8	3.8	3.4	3.4	6.4	2.7	12	16	12	13	14
23	11	3.5	4.2	3.0	3.4	6.4	2.4	18	16	14	17	13
24	11	2.9	4.4	2.8	3.2	4.2	2.3	20	17	16	48	12
25	11	3.7	5.2	2.8	3.0	4.0	2.3	21	18	15	23	12
26	11	4.6	9.4	2.6	2.8	5.2	2.4	18	19	17	16	11
27	10	3.0	14	2.4	2.8	6.4	2.4	12	17	13	13	11
28	9.7	2.9	15	2.3	3.0	5.8	2.7	12	16	11	12	11
29	8.4	3.0	6.7	2.4	3.0	5.4	3.4	13	14	12	11	10
30	8.4	2.9	5.4	2.7	---	5.4	2.9	14	17	14	10	9.5
31	4.2	---	5.0	2.6	---	6.4	---	14	---	14	11	---
TOTAL	328.2	110.5	146.1	103.8	89.6	124.3	93.7	289.1	482	427	574	404.5
MEAN	10.6	3.68	4.71	3.35	3.09	4.01	3.12	9.33	16.1	13.8	18.5	13.5
MAX	17	7.2	15	4.8	3.8	6.4	5.6	21	24	17	48	17
MIN	4.2	2.9	2.9	2.3	2.6	2.6	2.1	2.7	13	11	10	9.5
AC-FT	651	219	290	206	178	247	186	573	956	847	1140	802

CAL YR 1983 TOTAL 3535.0 MEAN 9.68 MAX 41 MIN 2.2 AC-FT 7010
WTR YR 1984 TOTAL 3172.8 MEAN 8.67 MAX 48 MIN 2.1 AC-FT 6290

09371500 McELMO CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'23", long 108°40'22", in NE¼ sec.1, T.35N., R.71 W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek, and 4 mi southwest of Cortez.

DRAINAGE AREA.--230 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1926 to September 1929, April 1940 to September 1945, October 1950 to September 1954 (monthly discharge only for some periods, published in WSP 1313), January 1982 to current year.

REVISED RECORDS.--WSP 1313: 1927, 1927 (M).

GAGE.--Water-stage recorder. Altitude of gage is 5,700 ft, by barometer. Prior to Sept. 30, 1929, at site 3 mi downstream at different datum. Mar. 29, 1940 to Nov. 2, 1941, at site 150 ft upstream at datum 4.20 ft, higher. Nov. 3, 1941 to Sept. 30, 1945, at present site at datum 4.00 ft, higher. Oct. 1, 1950 to Sept. 30, 1954, at present site at datum 2.50 ft, higher, Jan. 1, 1982, to present, at former site at same datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 200 acres above station. Flow is mainly return flows from irrigated lands for Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--14 years (water years 1927-29, 1941-45, 1951-54, 1983-84), 54.3 ft³/s; 39,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s, Sept. 9, 1927, gage height, 6.45 ft, from rating curve extended above 240 ft³/s, on basis of slope-area measurement at gage height, 5.72 ft; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 834 ft³/s at 2330 Aug. 23, gage height, 6.81 ft; minimum daily, 19 ft³/s, Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	61	32	39	24	34	44	22	50	89	96	101
2	82	63	39	30	24	32	38	21	48	85	93	98
3	70	57	46	28	26	34	42	22	52	73	81	80
4	63	49	42	30	28	28	30	23	52	66	81	79
5	60	49	36	30	28	24	28	23	80	67	88	69
6	56	47	29	30	30	22	27	21	128	68	97	66
7	52	48	34	30	32	21	28	20	125	67	98	63
8	54	58	39	30	30	22	28	22	111	69	91	65
9	58	66	34	30	29	23	30	26	104	73	85	65
10	59	53	33	28	30	26	36	27	101	72	82	66
11	58	55	32	26	30	32	33	36	93	71	92	58
12	59	54	32	24	24	36	30	34	89	62	94	61
13	52	54	31	24	26	29	28	48	82	72	99	60
14	44	52	30	24	38	29	26	51	76	75	97	60
15	42	44	32	24	32	34	26	59	83	80	94	65
16	41	44	30	20	26	32	25	58	88	72	106	77
17	42	50	32	19	35	27	24	50	95	70	121	83
18	41	90	32	22	26	26	21	39	91	72	108	73
19	41	63	31	22	24	24	21	39	86	74	118	69
20	48	44	31	24	20	20	26	35	89	71	103	52
21	59	45	30	22	22	22	28	34	85	67	96	52
22	52	43	38	24	26	27	23	36	84	66	85	55
23	52	35	32	22	26	28	21	37	85	76	137	59
24	56	35	31	20	24	24	21	42	90	102	263	70
25	57	36	35	20	24	27	21	42	96	104	115	70
26	59	38	70	22	22	32	23	42	98	112	107	76
27	63	30	136	22	21	32	22	38	89	114	95	90
28	56	33	106	20	25	26	22	35	83	110	88	81
29	56	34	43	20	32	26	26	42	76	115	90	62
30	59	36	47	22	---	30	23	45	89	162	94	56
31	61	---	44	22	---	41	---	48	---	96	95	---
TOTAL	1755	1466	1289	770	784	870	821	1117	2598	2572	3189	2081
MEAN	56.6	48.9	41.6	24.8	27.0	28.1	27.4	36.0	86.6	83.0	103	69.4
MAX	103	90	136	39	38	41	44	59	128	162	263	101
MIN	41	30	29	19	20	20	21	20	48	62	81	52
AC-FT	3480	2910	2560	1530	1560	1730	1630	2220	5150	5100	6330	4130

CAL YR 1983 TOTAL 27070 MEAN 74.2 MAX 237 MIN 28 AC-FT 53690
WTR YR 1984 TOTAL 19312 MEAN 52.8 MAX 263 MIN 19 AC-FT 38310

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 37°19'23", long 108°40'22", (Mud Creek, CO, Quad., scale, 1:24,000), in NE¼ Sec. 1, T.35N., R.17W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek and 4 mi southwest of Cortez.

PERIOD OF RECORD.--January 1, 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 6, 1982 to current year.
WATER TEMPERATURES: February 6, 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 4,100 micromhos Mar. 6, 1984; minimum, 847 micromhos Aug. 24, 1982.
WATER TEMPERATURES: Maximum 26.0°C July 26, 1984; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 4,100 micromhos Mar. 6; minimum, 1,130 micromhos June 9.
WATER TEMPERATURES: Maximum 26.0°C July 20; minimum 0.0°C, many days during winter months.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2130	1620	2690	3110	3560	2540	3490	3320	1590	1480	1660	1750
2	1900	1570	2790	3210	3560	2660	3480	3240	1580	1500	1620	1740
3	1910	1680	2850	3260	3600	2800	3620	3030	1570	1630	1520	1710
4	1890	1840	2900	3230	3340	3120	3640	2810	1580	1780	1570	1730
5	1860	1880	2840	3160	3160	3330	3640	2810	1610	1760	1570	1750
6	1860	1880	2940	3090	3060	3560	3640	2880	1660	1780	1580	1780
7	1680	1880	3040	2990	2920	3580	3570	2890	1580	1800	1560	1770
8	1590	1910	3070	2980	2920	3520	3560	2610	1510	1800	1570	1780
9	1530	2440	3050	2940	3000	3560	3320	2610	1440	1810	1600	1740
10	1510	2340	3040	2950	2950	3520	3190	2280	1500	1820	1610	1710
11	1560	2230	3090	3010	2800	3350	3200	1930	1550	1760	1640	1740
12	1530	2160	3150	3000	2950	3380	3170	1950	1520	1820	1630	1780
13	1630	2140	3180	2870	2900	3470	3120	1780	1470	1860	1680	1780
14	1760	2070	3190	2810	2480	3500	3110	1780	1630	1850	1670	1770
15	1820	1980	3220	2800	2710	3440	3120	1600	1640	1880	1680	1770
16	1840	1930	3160	2980	2720	3470	3210	1600	1580	1860	1740	1790
17	1850	1690	3280	2780	2510	3560	3310	1790	1510	1850	1840	1780
18	1850	1910	3280	2910	2590	3590	3390	1860	1390	1560	1760	1770
19	1860	2300	3320	3310	2660	3600	3430	1760	1400	1590	1680	1790
20	1860	2310	3220	3370	2510	3620	3360	2020	1420	1590	1750	1780
21	1590	2310	2940	3410	2480	3780	3270	2110	1470	1590	1700	1820
22	1620	2380	3020	3320	2540	3700	3390	2090	1570	1610	1690	1820
23	1610	2510	3060	3260	2690	3620	3490	2110	1440	1600	1750	1840
24	1590	2430	3000	3270	2480	3350	3420	2040	1400	1660	2280	2040
25	1570	2680	2980	3250	2710	3350	3360	2080	1360	1600	1800	1830
26	1560	2660	3080	3230	2900	2840	3300	1940	1400	1310	1730	1840
27	1570	2720	2980	3280	2990	3060	3220	1790	1430	1240	1710	1800
28	1640	2760	2680	3360	2950	3440	3180	1950	1440	1250	1630	1650
29	1620	2630	2580	3390	2740	3250	3240	1610	1610	1240	1590	1720
30	1600	2770	2960	3430	---	2990	3300	1600	1480	1680	1710	1780
31	1610	---	3130	3490	---	2690	---	1580	---	1660	1710	---
MEAN	1710	2190	3020	3140	2880	3330	3360	2180	1510	1650	1680	1780

WTR YR 1984 MEAN 2370 MAX 3780 MIN 1240

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	12.5	11.0	7.5	3.0	.5	.5	.0	.0	.0	4.0	.0
2	14.5	11.5	11.0	7.5	4.5	3.0	.0	.0	.0	.0	6.0	.5
3	13.0	10.0	10.5	6.5	3.5	1.0	.0	.0	2.0	.0	6.0	2.0
4	14.5	9.5	10.5	6.0	3.5	2.0	.0	.0	.5	.0	3.0	.5
5	15.0	10.0	10.5	8.0	2.0	.5	.0	.0	.5	.0	4.0	.0
6	15.5	12.0	9.5	6.0	1.0	.5	.5	.0	.5	.0	3.0	.0
7	14.0	10.0	9.5	5.5	1.0	.5	.5	.0	.5	.0	4.5	.0
8	14.0	9.5	8.5	5.5	1.0	1.0	.5	.0	1.0	.0	4.5	.0
9	16.0	11.5	5.5	3.0	1.5	1.0	1.0	.0	1.5	.0	6.5	.5
10	15.0	11.0	6.0	3.5	3.0	1.5	.0	.0	2.0	.5	7.5	.5
11	13.5	10.0	6.0	3.5	3.5	1.0	.5	.0	2.0	.0	7.0	3.5
12	12.5	7.5	7.0	4.5	3.5	1.5	.0	.0	1.0	.0	6.5	1.0
13	12.0	7.5	7.5	5.0	3.0	1.0	.0	.0	2.0	.0	8.5	2.0
14	12.0	9.0	7.0	3.5	2.5	1.0	.0	.0	2.5	1.0	6.5	3.5
15	11.5	6.5	5.0	1.5	4.0	1.5	.5	.0	2.5	.0	8.0	3.5
16	11.5	6.0	4.5	1.0	1.0	1.0	3.0	.0	3.0	.0	10.0	5.0
17	11.5	7.0	4.5	1.5	3.5	1.0	.0	.0	2.5	1.5	8.5	2.5
18	13.0	8.5	5.0	3.5	3.5	1.0	.0	.0	3.0	.0	7.5	2.5
19	12.5	8.0	3.5	1.5	3.0	2.5	.0	.0	2.0	.0	9.0	1.5
20	11.0	7.5	3.5	2.5	3.0	.5	.0	.0	1.5	.0	10.5	1.5
21	11.0	7.0	3.5	2.5	.5	.5	.0	.0	2.0	.0	11.0	3.0
22	11.0	6.0	2.5	1.0	3.0	.5	.0	.0	3.5	.0	10.0	5.0
23	10.5	6.0	2.0	.0	1.5	.5	.0	.0	3.0	.0	9.5	3.0
24	10.0	7.0	1.5	.0	3.5	1.5	.0	.0	2.0	.0	9.5	2.5
25	11.0	7.0	2.5	1.5	4.0	3.0	.0	.0	2.0	.0	9.0	4.5
26	11.0	6.5	2.5	.5	4.0	3.5	.0	.0	3.0	.0	4.5	2.0
27	10.0	6.5	.5	.5	3.5	2.0	.0	.0	3.0	.0	9.0	2.5
28	11.0	6.5	.5	.5	2.0	.0	.0	.0	4.0	.0	9.5	2.0
29	11.0	6.5	.5	.5	.0	.0	.0	.0	5.0	.0	11.5	4.5
30	11.0	8.0	1.0	.5	.0	.0	.0	.0	---	---	7.0	3.0
31	11.5	7.5	---	---	.5	.0	.0	.0	---	---	8.0	2.0
MONTH	16.0	6.0	11.0	.0	4.5	.0	3.0	.0	5.0	.0	11.5	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	3.0	15.0	6.5	20.5	14.0	22.5	15.0	24.5	19.0	21.0	17.0
2	7.0	2.0	14.0	8.5	20.5	12.0	24.0	15.5	25.5	17.5	20.5	15.0
3	9.5	3.0	17.5	6.5	19.5	15.0	24.5	17.5	24.0	18.5	21.0	14.5
4	11.5	3.0	16.0	10.5	20.0	12.0	24.5	15.5	24.0	18.5	20.5	14.5
5	13.5	4.0	18.5	10.0	17.0	12.0	25.0	15.5	22.0	18.5	20.5	14.0
6	10.0	7.0	17.0	8.5	15.5	10.5	25.5	17.5	23.0	18.0	20.5	14.5
7	14.0	6.5	16.5	7.0	18.5	10.5	25.0	17.5	24.0	16.5	20.0	14.0
8	15.0	6.0	17.5	5.5	17.0	12.5	23.0	17.5	23.5	16.5	19.5	12.5
9	11.0	7.0	18.5	7.5	17.5	9.5	23.5	17.5	23.5	16.0	20.0	12.5
10	12.5	4.0	19.5	9.5	18.5	11.5	25.0	18.0	23.0	18.0	20.0	14.5
11	13.0	7.5	19.5	10.0	19.0	12.0	25.5	16.5	23.0	18.0	20.0	16.0
12	13.0	4.5	20.5	11.0	20.5	10.5	25.5	18.0	23.0	18.0	20.5	14.5
13	14.5	6.0	20.5	12.0	20.5	14.0	21.5	18.0	23.5	16.5	18.0	12.5
14	15.0	6.0	20.0	13.5	21.0	14.0	25.0	18.0	23.5	17.5	19.5	10.5
15	15.5	5.5	16.0	12.5	21.0	15.0	23.5	18.0	23.0	17.5	19.5	15.5
16	15.5	6.0	18.5	11.5	19.5	15.0	25.0	18.0	24.5	17.5	19.5	15.5
17	16.0	6.0	19.5	10.5	20.5	12.5	25.0	18.5	23.0	17.5	19.5	15.0
18	16.0	9.5	18.5	12.5	21.0	14.5	24.0	18.0	23.0	17.0	20.5	14.5
19	11.0	6.0	20.5	9.5	22.5	15.5	25.5	16.0	23.0	17.0	20.0	14.5
20	10.0	4.5	20.0	11.5	21.0	15.5	26.0	18.0	21.0	17.0	18.5	12.5
21	10.0	5.5	20.0	11.5	20.5	15.0	25.0	20.0	22.0	16.0	18.5	15.0
22	14.5	4.0	21.0	11.5	20.5	13.5	21.0	18.0	21.0	17.0	18.0	13.0
23	16.0	5.0	21.5	11.5	22.0	13.5	23.5	17.5	21.0	15.5	18.0	14.5
24	17.0	7.0	21.0	13.0	21.5	15.0	21.5	17.5	20.5	17.0	18.0	12.5
25	10.5	5.0	21.0	9.0	20.5	17.0	21.5	18.0	21.0	15.5	16.5	11.5
26	8.5	2.0	21.5	11.0	20.5	15.0	21.0	16.0	22.0	17.0	15.0	12.5
27	6.0	2.0	22.0	12.0	22.5	15.0	21.0	17.5	22.0	15.5	15.0	12.5
28	3.5	1.5	22.0	10.0	23.0	15.0	23.0	17.5	22.5	17.0	15.0	9.5
29	11.5	1.5	22.0	11.5	22.5	17.0	23.0	17.5	22.5	16.0	14.0	9.0
30	13.0	4.0	21.5	12.0	21.0	15.5	23.0	17.5	21.0	16.0	12.5	6.5
31	---	---	17.5	14.5	---	---	23.0	17.5	21.0	17.5	---	---
MONTH	17.0	1.5	22.0	5.5	23.0	9.5	26.0	15.0	25.5	15.5	21.0	6.5
YEAR	26.0	.0										

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

PERIOD OF RECORD.--Streamflow records, March 1951 to current year. Water-quality data available, November 1977 to September 1981.

REVISED RECORDS.--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,890 ft, from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres above station. One diversion above station for irrigation of about 60 acres below. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin). Several observations of specific-conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 46.9 ft³/s; 33,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s, Aug. 7, 1967, gage height, 7.58 ft, from floodmark in gage well, from rating curve extended above 2,100 ft³/s; maximum gage height, 8.13 ft, Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s, Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 620 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 23	2400	795	5.71	Aug. 26	0400	825	5.78
July 30	0330	*1,350	6.62				

Minimum daily discharge, 3.8 ft³/s, May 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	76	49	58	32	54	62	13	30	65	111	86
2	121	81	49	44	32	50	53	9.7	30	70	94	95
3	91	78	75	42	34	56	59	7.0	35	59	79	83
4	79	56	68	46	36	49	42	5.5	35	44	65	70
5	70	52	62	49	37	36	35	5.5	49	34	56	60
6	67	50	34	47	40	30	33	5.0	122	40	87	53
7	58	47	44	45	43	28	33	3.8	133	40	76	52
8	59	60	44	47	43	29	33	3.8	109	42	71	47
9	64	91	43	46	37	33	35	5.5	89	44	67	46
10	70	62	47	42	42	37	44	7.5	87	40	56	44
11	68	59	46	42	42	43	39	10	70	40	54	43
12	67	60	46	35	30	65	35	20	59	33	54	43
13	67	54	43	34	34	44	30	25	59	30	64	47
14	50	56	40	34	49	40	28	40	43	43	75	47
15	43	49	43	35	40	44	27	44	46	59	65	52
16	40	43	36	27	36	52	23	46	58	44	58	58
17	42	49	43	28	47	42	23	43	54	40	97	75
18	42	109	44	28	37	36	19	32	59	52	116	71
19	40	140	44	28	30	34	14	22	44	56	99	58
20	42	81	46	32	28	29	23	19	40	47	100	49
21	67	78	40	30	29	27	29	19	46	50	99	39
22	59	81	32	32	35	34	25	20	47	46	78	39
23	50	64	58	30	33	35	18	19	42	80	68	39
24	58	43	46	28	30	32	15	20	52	157	273	49
25	67	62	47	28	34	32	14	23	59	104	180	50
26	65	65	91	30	26	42	17	26	67	121	201	47
27	71	42	177	30	26	49	14	23	59	121	136	65
28	70	42	220	28	27	37	9.7	15	52	116	119	81
29	68	42	83	28	42	33	15	15	49	109	100	76
30	71	49	65	30	---	33	15	19	54	338	89	67
31	78	---	64	30	---	52	---	22	---	140	81	---
TOTAL	2037	1921	1869	1114	1031	1237	861.7	588.3	1778	2304	2968	1731
MEAN	65.7	64.0	60.3	35.9	35.6	39.9	28.7	19.0	59.3	74.3	95.7	57.7
MAX	133	140	220	58	49	65	62	46	133	338	273	95
MIN	40	42	32	27	26	27	9.7	3.8	30	30	54	39
AC-FT	4040	3810	3710	2210	2040	2450	1710	1170	3530	4570	5890	3430

CAL YR 1983 TOTAL 28387.0 MEAN 77.8 MAX 290 MIN 18 AC-FT 56310
WTR YR 1984 TOTAL 19440.0 MEAN 53.1 MAX 338 MIN 3.8 AC-FT 38560

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations and diversions of 6 selected diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TO PLATTE RIVER BASIN												
09010000	0	0	0	0	0	0	0	0	3,530	9,130	3,960	1,000
Water year 17,620												
09013000	9,760	15,110	26,930	11,930	18,490	21,130	5,550	2,470	12,580	31,190	24,860	15,510
Water year 195,510												
09021500	5.5	0	0	0	0	0	0	0	274	647	159	37
Water year 1,120												
09050590	0	0	0	0	0	0	0	0	0	0	0	0
Water year 0												
TO ARKANSAS RIVER BASIN												
09042000	1,870	0	0	0	0	0	0	960	1,680	721	742	1,310
Water year 7,280												
09063700	0	738	0	0	0	2,740	0	1,690	3,130	4,230	12,680	2,710
Water year 27,920												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN	
09012000	Eureka ditch
09022500	Moffat Water tunnel
09046000	Boreas Pass ditch
09047300	Vidler tunnel

TO ARKANSAS RIVER BASIN	
09061500	Columbine ditch
09062000	Ewing ditch
09062500	Wurtz ditch
09073000	Twin Lakes tunnel
09077160	Chas. H. Boustead tunnel
09077500	Busk-Ivanhoe tunnel
09115000	Larkspur ditch

TO RIO GRANDE BASIN	
09118200	Tarbell ditch
09121000	Tabor ditch
09341000	Treasure Pass ditch
09347000	Don LaFont ditches 1&2
09348000	Williams Cr-Squaw Pass ditch
09351000	Pine River-Weminuche Pass ditch
09351500	Weminuche Pass ditch

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1984

						Annual maximum		
Station number	Station name	Location	Total Drainage area (mi^2)	Non-contributing	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		SAN JUAN RIVER BASIN						
09361400	Junction Creek near Durango, CO	Lat 37°20'04", long 107°54'35", sec.36, T.36N., R.10 W., La Plata County, on left bank 4.5 mi upstream from mouth and 4.5 mi northwest of Durango.	26.3		1959-65, 1972, 1979-84	5-24-84	3.18	340

09165000 - DOLORES RIVER BELOW RICO, CO. (LAT 37 38 20 LONG 108 03 35)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983				
06...	1225	75	291	9.0
NOV				
03...	1220	34	440	7.0
DEC				
07...	1505	35	365	.0
JAN , 1984				
10...	1425	23	502	.0
FEB				
16...	1415	42	464	.0
APR				
05...	1310	57	446	6.0
MAY				
02...	1120	114	--	3.0
14...	1430	712	163	9.0
MAY , 1984				
29...	0710	1290	110	3.0
JUN				
12...	1615	563	110	12.0
27...	1050	588	117	8.0
JUL				
23...	1040	98	263	13.0
AUG				
14...	0930	99	281	9.5
SEP				
13...	1050	55	202	8.0

09166500 - DOLORES RIVER AT DOLORES, CO. (LAT 37 28 16 LONG 108 30 15)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983				
06...	1415	160	310	13.0
NOV				
03...	1400	86	420	9.0
17...	1630	83	423	4.0
DEC				
19...	1315	70	409	1.0
JAN , 1984				
19...	1155	75	410	.0
MAR				
07...	1600	111	387	.5
21...	1130	269	--	.5
APR				
05...	1455	241	376	10.0
24...	1535	1080	232	10.0
MAY				
02...	1335	752	--	6.0
MAY , 1984				
14...	1150	3830	170	6.0
17...	0730	4850	144	4.0
22...	0830	5310	141	5.0
JUN				
11...	0800	257	298	12.0
11...	1000	1530	177	9.0
28...	1800	1100	188	16.0
28...	1845	.14	650	25.0
JUL				
19...	1455	333	263	20.0
19...	1525	.11	600	25.0
AUG				
21...	1420	719	240	15.0
SEP				
27...	1020	238	364	11.0

09166950 - LOST CANYON CREEK NEAR DOLORES, CO. (LAT 37 26 45 LONG 108 28 03)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
APR , 1984				
23...	1540	78	--	10.0
MAY				
01...	1430	48	--	7.0
07...	1010	270	60	5.5
14...	0950	386	51	5.5
22...	0925	218	68	7.0
JUN , 1984				
11...	0800	2.6	298	12.0
28...	1845	.14	650	25.0
JUL				
19...	1525	.11	600	25.0
AUG				
21...	1520	.23	544	24.0

09168100 - DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO. (LAT 37 52 36 LONG 108 34 57)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
MAR , 1984				
01...	1300	15	3120	1.5
APR				
03...	1030	18	3600	8.0
MAY				
01...	1725	116	1950	12.0
JUN				
11...	1300	102	1200	15.0
JUL , 1984				
24...	1100	10	4430	21.0
AUG				
15...	1340	21	2940	19.5
SEP				
14...	1450	3.8	3620	22.0

09172500 - SAN MIGUEL RIVER NEAR PLACERVILLE, CO. (LAT 38 02 05 LONG 108 07 15)

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983				
06...	0945	175	327	9.0
NOV				
03...	1025	88	410	6.0
DEC				
07...	0850	70	378	.0
JAN , 1984				
10...	0910	60	414	.0
FEB				
16...	1200	83	360	.0
APR				
04...	1800	125	412	8.0
30...	1410	300	352	8.0
MAY , 1984				
29...	1055	1790	207	7.0
JUN				
11...	1400	800	275	11.5
27...	1700	1260	166	14.0
JUL				
23...	1645	436	--	19.0
AUG				
14...	1445	247	291	16.5
SEP				
13...	1555	141	330	14.0

09177000 - SAN MIGUEL RIVER AT URAVAN, CO. (LAT 38 21 26 LONG 108 42 44)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983					MAY , 1984				
05...	1805	257	749	15.0	08...	0830	3060	254	5.5
NOV					15...	1245	5240	285	9.5
03...	0830	135	926	7.0	29...	1430	3070	238	12.0
DEC					JUN				
06...	1700	115	808	.0	12...	1300	1520	385	15.0
JAN , 1984					27...	2000	1550	298	17.0
09...	1655	170	816	20.0	JUL				
FEB					24...	0900	618	--	20.0
16...	1015	136	873	.0	AUG				
APR					14...	1730	250	745	25.0
04...	1530	251	822	11.0	SEP				
30...	1900	1020	528	9.0	13...	1815	153	998	22.0

09239500 - YAMPA RIVER AT STEAMBOAT SPRINGS, CO. (LAT 40 29 01 LONG 106 49 54)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983					FEB , 1984				
26...	1200	134	260	7.5	28...	1130	104	290	.5
NOV					MAR				
23...	1120	232	260	.5	26...	1200	165	280	2.0

09241000 - ELK RIVER AT CLARK, CO. (LAT 40 43 03 LONG 106 54 55)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
APR , 1984				
02...	1300	64	105	1.0

09244410 - YAMPA RIVER BELOW LIVERSION, NEAR HAYDEN, CO. (LAT 40 29 18 LONG 107 09 33)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
DEC , 1983					MAY , 1984				
16...	1340	333	330	.0	16...	1500	13100	216	--
MAR , 1984									
02...	1350	231	340	1.0					

09245000 - ELKHEAD CREEK NEAR ELKHEAD, CO. (LAT 40 40 11 LONG 107 17 05)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
MAY , 1984				
04...	1000	29	--	3.0

09260050 - YAMPA RIVER AT DEERLODGE PARK, CO. (LAT 40 27 02 LONG 108 31 20)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JAN , 1984				
04...	1300	651	470	.0

09304000 - SOUTH FORK WHITE RIVER AT BUFORD, CO. (LAT 39 58 28 LONG 107 37 29)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
NOV , 1983					MAY , 1984				
28...	--	148	230	1.5	07...	1405	146	280	805
MAR , 1984					21...	1430	1100	220	6.0
30...	--	116	260	5.5					
APR									
26...	1320	179	275	5.0					

09304500 - WHITE RIVER NEAR MEEKER, CO. (LAT 40 02 01 LONG 107 51 42)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
NOV , 1983					APR , 1984				
02...	1200	445	440	7.5	30...	1200	585	625	6.0
DEC									
08...	1135	441	550	1.0					

09339900 - EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO. (LAT 37 23 23 LONG 106 50 26)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1983					JUN , 1984				
04...	1210	64	125	10.0	27...	1215	227	75	12.0
NOV					JUL				
02...	1220	23	155	9.0	19...	1120	61	114	15.0
MAR , 1984					AUG				
12...	1125	41	172	.5	08...	1235	45	120	17.0
JUN									
15...	1610	375	72	13.0					

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09342500 - SAN JUAN RIVER AT PAGOSA SPRINGS, CO. (LAT 37 15 58 LONG 107 00 37)									
OCT , 1983					APR , 1984				
04...	1400	391	94	13.0	17...	1155	959	116	10.0
NOV					JUN				
02...	1610	97	136	13.0	15...	1645	1530	63	13.0
DEC					27...	1300	861	90	14.0
06...	1155	60	210	.5	JUL				
JAN , 1984					19...	1310	172	158	20.0
09...	1145	95	175	2.5	AUG				
FEB					08...	1400	156	132	20.0
15...	1155	88	180	1.0					
MAR									
22...	1505	333	247	6.5					
09346000 - NAVAJO RIVER AT EDITH, CO. (LAT 37 00 10 LONG 106 54 25)									
OCT , 1983					MAR , 1984				
04...	1025	125	195	11.0	22...	1255	260	303	4.5
NOV					APR				
02...	1430	58	228	9.5	17...	1315	130	279	13.0
DEC					JUN				
06...	0915	31	294	.0	15...	1405	65	249	19.0
JAN , 1984					27...	1010	115	184	13.0
09...	1010	53	253	.5	AUG				
FEB					08...	1050	80	287	15.0
15...	1025	55	277	.5					
09346400 - SAN JUAN RIVER NEAR CARRACAS, CO. (LAT 37 00 49 LONG 107 18 42)									
OCT , 1983					APR , 1984				
05...	0940	714	166	9.0	18...	1545	1730	214	11.0
NOV					JUN				
03...	1005	207	281	9.0	13...	1345	1550	108	15.0
DEC					29...	1010	982	145	18.0
06...	1515	141	495	.5	JUL				
JAN , 1984					20...	1015	353	260	20.5
09...	1440	200	403	1.0	AUG				
FEB					21...	1040	344	306	19.5
15...	1500	249	420	1.0	SEP				
MAR					12...	1050	278	297	17.5
16...	1010	1230	555	4.5					
09349800 - PIEDRA RIVER NEAR ARBOLES, CO. (LAT 37 05 18 LONG 107 23 50)									
OCT , 1983					APR , 1984				
05...	1115	422	195	10.5	24...	1055	878	218	9.5
NOV					JUN				
03...	0835	127	291	6.0	15...	1000	1080	104	13.0
DEC					29...	1150	498	170	19.0
06...	1330	89	405	1.0	JUL				
JAN , 1984					19...	1500	193	270	25.0
09...	1320	129	406	2.0	AUG				
FEB					21...	1150	286	216	19.5
15...	1330	118	421	4.5	SEP				
MAR					12...	1230	264	262	17.0
12...	1415	208	378	7.5					
09354500 - LOS PINOS RIVER AT LA BOCA, CO. (LAT 37 00 34 LONG 107 35 56)									
OCT , 1983					APR , 1984				
05...	1305	249	195	14.0	24...	1255	379	147	13.0
NOV					JUN				
03...	1410	114	238	12.5	13...	1045	476	197	14.0
DEC					JUL				
07...	1135	91	305	1.0	20...	1215	366	145	19.5
JAN , 1984					AUG				
10...	1055	64	300	.5	21...	1330	397	161	22.0
FEB					SEP				
16...	1055	79	255	1.0	12...	1345	262	202	19.0
MAR									
15...	1115	451	267	4.5					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09355000 - SPRING CREEK AT LA BOCA, CO. (LAT 37 00 40 LONG 107 35 47)									
OCT , 1983					APR , 1984				
05...	1430	63	291	16.5	24...	1405	5.9	760	20.5
NOV					JUN				
03...	1240	5.9	297	13.0	13...	0935	62	291	15.0
DEC					JUL				
07...	1245	6.2	1490	1.0	20...	1255	82	260	25.5
JAN , 1984					AUG				
10...	1150	5.6	1280	.5	21...	1500	96	228	21.5
FEB					SEP				
16...	1200	7.8	990	1.0	12...	1430	69	281	19.5
MAR									
15...	1010	43	618	6.0					
09361500 - ANIMAS RIVER AT DURANGO, CO. (LAT 37 16 45 LONG 107 52 47)									
OCT , 1983					APR , 1984				
04...	1525	615	356	11.0	25...	1125	1210	326	8.0
NOV					JUN				
23...	1300	229	--	4.0	28...	0935	3730	120	13.0
DEC					JUL				
27...	1320	311	486	6.0	27...	0915	1190	270	14.0
JAN , 1984					AUG				
26...	1325	234	519	.0	24...	0900	1360	291	14.0
FEB					SEP				
24...	1140	266	441	4.0	24...	1100	603	500	11.5
MAR									
28...	1320	379	466	6.5					
09371400 - HARTMAN DRAW AT CORTEZ, CO. (LAT 37 19 26 LONG 108 36 52)									
OCT , 1983					APR , 1984				
06...	0910	14	1830	12.5	24...	1310	5.3	3040	16.0
27...	0900	8.2	1830	7.5	JUN				
NOV					08...	0915	20	1400	12.0
29...	0920	5.1	3260	.0	JUL				
JAN , 1984					18...	1430	17	1840	24.0
05...	0925	5.8	2940	.0	AUG				
FEB					22...	1535	30	1850	21.0
22...	0910	6.1	2940	.0					
MAR									
07...	1415	9.7	3460	5.5					
09371420 - MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO. (LAT 37 19 38 LONG 108 38 55)									
OCT , 1983					APR , 1984				
06...	1045	35	1650	15.0	24...	1200	11	3570	16.0
27...	1205	43	1480	11.0	JUN				
NOV					08...	1040	72	1070	14.0
29...	1040	13	3360	.0	JUL				
JAN , 1984					19...	1250	23	2180	22.0
05...	1845	12	3460	.0	AUG				
FEB					22...	1350	40	1850	21.5
21...	1050	4.9	2940	.0					
MAR									
21...	1300	11	--	11.0					
09371492 - MUD CREEK AT STATE HIGHWAY 32, NEAR CORTEZ, CO. (LAT 37 18 46 LONG 108 39 38)									
OCT , 1983					APR , 1984				
06...	1315	11	2460	13.0	16...	1145	2.5	5520	11.0
27...	1355	10	2490	11.0	JUN				
NOV					08...	1230	19	2180	13.5
29...	1145	4.0	5190	1.0	JUL				
JAN , 1984					18...	1140	15	2100	21.0
05...	1430	4.3	5000	1.5	AUG				
FEB					22...	1450	13	2450	21.0
21...	1335	4.5	5000	.0					
09372000 - MCELMO CREEK NEAR COLORADO-UTAH STATE LINE (LAT 37 19 27 LONG 109 00 54)									
OCT , 1983					APR , 1984				
07...	1055	59	2700	13.5	24...	1020	18	3170	14.0
NOV					JUN				
04...	1130	58	1720	10.0	08...	1000	110	--	16.0
29...	1000	38	3520	.5	JUL				
JAN , 1984					19...	1100	64	2080	21.0
05...	1250	37	2520	2.0	AUG				
FEB					22...	1200	75	2040	21.5
22...	1055	41	2940	3.0					
MAR									

LA PLATA COUNTY

370122107522700 NB 32- 9-18BBB. B. Cogburn. Drilled stock water-table well in Naciemento Formation. Diameter, 6 in. Depth, 138 ft. MP, 0.3 ft above lsd. Altitude of land surface, 5,980 ft. Records available: 1973-84.

Highest water level, 19.18 ft below lsd, Aug. 26, 1976; lowest water level, 27.3 ft below lsd, Apr. 30, 1974.

July 22, 1984 18.32 ft

370934107404100 NB34-08-26DAD2. U.S. Geological Survey Oxford Test Hole. Drilled observation water-table well in San Jose Formation. Diameter 6 in. Depth, 502 ft. MP, 1.0 ft above lsd. Altitude of land surface, 6,635 ft. Records available: 1975, 1980-84.

Highest water level, 17.0 ft below lsd, Oct. 2, 1975; lowest water level, 27.23 ft below lsd, Aug. 13, 1980.

Aug. 1, 1984 21.53 ft

MOFFAT COUNTY

403040107420801 SB 7-92-34 DBD. J. Herod. Drilled domestic water-table well in Browns Park Formation. Diameter, 5 in. Depth, 190 ft. MP, 4.0 ft below lsd. Altitude of land surface, 6,545 ft. Records available: 1974-80, 1983-84

Highest water level, 70.3 ft below lsd, Feb. 2, 1976; lowest water level, 64.49ft below lsd, Dec. 20, 1984.

Dec. 20, 1984 64.49 ft, below lsd

MONTEZUMA COUNTY

370410108583701 NB33-20-25CDC. Ute Indian Tribe. Drilled stock water-table well in Dakota Sandstone. Diameter, 5 in. Depth, 250 ft. MP, 2.0 ft above lsd. Altitude of land surface, 4,900 ft. Records available: 1973-84.

Highest water level, -1.59 ft above lsd, Sept. 30, 1975; lowest water level, 59.43 ft below lsd, Aug. 18, 1980.

Aug. 2, 1984 52.05 ft

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54x10^{1}	millimeters (mm)
	2.54x10^{-2}	meters (m)
feet (ft)	3.048x10^{-1}	meters (m)
miles (mi)	1.609x10^{0}	kilometers (km)
	Area	
acres	4.047x10^{3}	square meters (m^2)
	4.047x10^{-1}	square hectometers (hm^2)
	4.047x10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590x10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785x10^{0}	liters (L)
	3.785x10^{0}	cubic decimeters (dm^3)
	3.785x10^{-3}	cubic meters (m^3)
million gallons	3.785x10^{3}	cubic meters (m^3)
	3.785x10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832x10^{1}	cubic decimeters (dm^3)
	2.832x10^{-2}	cubic meters (m^3)
cfs-days	2.447x10^{3}	cubic meters (m^3)
	2.447x10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233x10^{3}	cubic meters (m^3)
	1.233x10^{-3}	cubic hectometers (hm^3)
	1.233x10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832x10^{1}	liters per second (L/s)
	2.832x10^{1}	cubic decimeters per second (dm^3/s)
	2.832x10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309x10^{-2}	liters per second (L/s)
	6.309x10^{-2}	cubic decimeters per second (dm^3/s)
	6.309x10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381x10^{1}	cubic decimeters per second (dm^3/s)
	4.381x10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072x10^{-1}	megagrams (Mg) or metric tons